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12AP1/E5 -- Viventia Biotech  
 1964 -- Aventis  
 20K growth hormone -- AMUR  
 28P6/E6 -- Viventia Biotech  
 3-Hydroxyphthaloyl-beta-lactoglobulin --  
 4-IBB ligand gene therapy --  
 64-Cu MAb conjugate TETA-1A3 --  
 Mallinckrodt Institute of Radiology  
 64-Cu MAb conjugate TETA-CT84.66  
 64-Cu Trastuzumab TETA conjugate --  
 Genentech  
 A 200 -- Amgen  
 A10255 -- Eli Lilly  
 A1PDX -- Hedral Therapeutics  
 A6 -- Angstrom  
 aaAT-III -- Genzyme  
 Abciximab -- Centocor  
 ABI.001 -- Atlantic BioPharmaceuticals  
 ABT-828 -- Abbott  
 Accutin  
 Actinohivin  
 activin -- Biotech Australia, Human  
 Therapeutics  
 activin -- Curls  
 AD 439 -- Tanox  
 AD 519 -- Tanox  
 Adalimumab -- Cambridge Antibody Tech.  
 Adenocarcinoma vaccine -- Biomira -- NIS  
 Adenosine A2B receptor antagonists --  
 Adenosine Therapeutics  
 ADP-001 -- Axis Genetics  
 AF 13948 -- Affymax  
 Afelimomab -- Knoll  
 AFP-SCAN -- Immunomedics  
 AG 2195 -- Corixa  
 agalsidase alfa -- Transkaryotic Therapies  
 agalsidase beta -- Genzyme  
 AGENT -- Antisoma  
 AI 300 -- Autolimmune  
 AI-101 -- Teva  
 AI-102 -- Teva  
 AI-201 -- Autolimmune  
 AI-301 -- Autolimmune  
 AIDS vaccine -- ANRS, CIBG, Hesed  
 Biomed, Hollis-Eden, Rome, United  
 Biomedical, American Home Products,  
 Maxygen  
 airway receptor ligand -- IC Innovations  
 AJvW 2 -- Ajinomoto  
 AK 30 NGF -- Alkermes  
 Albuferon -- Human Genome Sciences  
 albumin -- Biogen, DSM Anti-Infectives,  
 Genzyme Transgenics, PPL Therapeutics,  
 TranXenoGen, Welfide Corp.  
 aldesleukin -- Chiron  
 alefacept -- Biogen  
 Alemtuzumab --  
 Allergy therapy -- ALK-Abello/Maxygen,  
 ALK-Abello/RP Scherer  
 allergy vaccines -- Allergy Therapeutics  
 Alnidofibatide -- Aventis Pasteur  
 Alnorine -- SRC VB VECTOR  
 ALP 242 -- Gruenenthal  
 Alpha antitrypsin -- Arriva/Hyland  
 Immuno/ProMetic/Protease Sciences  
 Alpha-1 antitrypsin -- Cutter, Bayer, PPL  
 Therapeutics, Profile, ZymoGenetics,  
 Arriva  
 Alpha-1 protease inhibitor -- Genzyme  
 Transgenics, Welfide Corp.  
 Alpha-galactose fusion protein --  
 Immunomedics  
 Alpha-galactosidase A -- Research  
 Corporation Technologies  
 Alpha-glucosidase -- Genzyme, Novazyme  
 Alpha-lactalbumin  
 Alpha-L-iduronidase -- Transkaryotic  
 Therapies, BioMarin  
 alteplase -- Genentech  
 alvircept sudotox -- NIH  
 ALX1-11 -- sNPS Pharmaceuticals  
 Alzheimer's disease gene therapy --

FIG. 1A

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AM-133 -- AMRAD  
 Amb a 1 immunostim conj. -- Dynavax  
 AMD 3100 -- AnorMED -- NIS  
 AMD 3465 -- AnorMED -- NIS  
 AMD 3465 -- AnorMED -- NIS  
 AMD Fab -- Genentech  
 Amediplase -- Menarini, Novartis  
 AM-F9  
 Amoebiasis vaccine  
 Amphiregulin -- Octagene  
 anakinra -- Amgen  
 analgesic -- Nobex  
 anacstim -- Amgen  
 Anergix.RA -- Corixa, Organon  
 Angiocidin -- InKine  
 angiogenesis inhibitors -- ILEX  
 AngioMab -- Antisoma  
 Angiopoietins -- Regeneron/Procter & Gamble  
 angiostatin -- EntreMed  
 Angiostatin/endostatin gene therapy -- Genetix Pharmaceuticals  
 angiotensin-II, topical -- Maret  
 Anthrax -- EluSys Therapeutics/US Army Medical Research Institute  
 Anthrax vaccine  
 Anti platelet-derived growth factor D human monoclonal antibodies -- CuraGen  
 Anti-17-1A/ MAb 3622W94 -- GlaxoSmithKline  
 Anti-2C4 MAb -- Genentech  
 anti-4-1BB monoclonal antibodies -- Bristol-Myers Squibb  
 Anti-Adhesion Platform Tech. -- Cytovax  
 Anti-adipocyte MAb -- Cambridge Antibody Tech./Obesity  
 antiallergics -- Maxygen  
 antiallergy vaccine -- Acambis  
 Anti-alpha-4-integrin MAB  
 Anti-angiogenesis monoclonal antibodies -- KS Biomedix/Schering AG  
 Anti-B4 MAb-DC1 conjugate -- ImmunoGen  
 Anti-B7 antibody PRIMATIZED -- IDEC  
 Anti-B7-1 MAB 16-10A1  
 Anti-B7-1 MAB 1G10  
 Anti-B7-2 MAB GL-1  
 Anti-B7-2-gelonin Immunotoxin -- Antibacterials/antifungals -- Diversa/IntraBiotics  
 Anti-beta-amyloid monoclonal antibodies -- Cambridge Antibody Tech., Wyeth-Ayerst  
 Anti-BLyS antibodies -- Cambridge Antibody Tech. /Human Genome Sciences  
 Antibody-drug conjugates -- Seattle Genetics/Eos  
 Anti-C5 MAB BB5-1 -- Alexion  
 Anti-C5 MAB N19-8 -- Alexion  
 Anti-C8 MAB anticancer cytokines -- BioPulse  
 anticancer matrix -- Telios Integra  
 Anticancer monoclonal antibodies -- ARIUS, Immunex  
 anticancer peptides -- Maxygen, Micrologix  
 anticancer prodrug Tech. -- Alexion  
 Antibody Technologies  
 anticancer Troy-Bodies -- Affite -- Affitech  
 anticancer vaccine -- NIH  
 anticancers -- Epimmune  
 Anti-CCR5/CXCR4 sheep MAB -- KS Biomedix Holdings  
 Anti-CD11a MAB KBA --  
 Anti-CD11a MAB M17  
 Anti-CD11a MAB TA-3 --  
 Anti-CD11a MAB WT.1 --  
 Anti-CD11b MAB -- Pharmacia  
 Anti-CD11b MAB LM2  
 Anti-CD154 MAB -- Biogen  
 Anti-CD16-anti-CD30 MAB -- Biotest  
 Anti-CD18 MAB -- Pharmacia  
 Anti-CD19 MAB B43 --  
 Anti-CD19 MAB -liposomal sodium butyrate conjugate --

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Anti-CD19 MAb-saporin conjugate --	Anti-CD4 MAb KT6
Anti-CD19-dsFv-PE38-immunotoxin --	Anti-CD4 MAb OX38
Anti-CD2 MAb 12-15 --	Anti-CD4 MAb PAP conjugate -- Bristol-Myers Squibb
Anti-CD2 MAb B-E2 -- Diaclone	Anti-CD4 MAb RIB 5-2
Anti-CD2 MAb OX34 --	Anti-CD4 MAb W3/25
Anti-CD2 MAb OX54 --	Anti-CD4 MAb YTA 3.1.2
Anti-CD2 MAb OX55 --	Anti-CD4 MAb YTS 177-9
Anti-CD2 MAb RM2-1	Anti-CD40 ligand MAb 5c8 -- Biogen
Anti-CD2 MAb RM2-2	Anti-CD40 MAb
Anti-CD2 MAb RM2-4	Anti-CD40 MAb 5D12 -- Tanox
Anti-CD20 MAb BCA B20	Anti-CD44 MAb A3D8
Anti-CD20-anti-Fc alpha RI bispecific MAb -- Medarex, Tenovus	Anti-CD44 MAb GKWA3
Anti-CD22 MAb-saporin-6 complex --	Anti-CD44 MAb IM7
Anti-CD3 immunotoxin --	Anti-CD44 MAb KM81
Anti-CD3 MAb 145-2C11 -- Pharming	Anti-CD44 variant monoclonal antibodies -- Corixa/Hebrew University
Anti-CD3 MAb CD4IgG conjugate -- Genentech	Anti-CD45 MAb BC8-I-131
Anti-CD3 MAb humanised -- Protein Design, RW Johnson	Anti-CD45RB MAb
Anti-CD3 MAb WT32	Anti-CD48 MAb HuLy-m3
Anti-CD3 MAb-ricin-chain-A conjugate --	Anti-CD48 MAb WM-63
Anti-CD3 MAb-xanthine-oxidase conjugate --	Anti-CD5 MAb -- Becton Dickinson
Anti-CD30 MAb BerH2 -- Medac	Anti-CD5 MAb OX19
Anti-CD30 MAb-saporin conjugate	Anti-CD6 MAb
Anti-CD30-scFv-ETA'-immunotoxin	Anti-CD7 MAb-PAP conjugate
Anti-CD38 MAb AT13/5	Anti-CD7 MAb-ricin-chain-A conjugate
Anti-CD38 MAb-saporin conjugate	Anti-CD8 MAb -- Amerimmune, Cytodyn, Becton Dickinson
Anti-CD3-anti-CD19 bispecific MAb	Anti-CD8 MAb 2-43
Anti-CD3-anti-EGFR MAb	Anti-CD8 MAb OX8
Anti-CD3-anti-interleukin-2-receptor MAb	Anti-CD80 MAb P16C10 -- IDEC
Anti-CD3-anti-MOV18 MAb -- Centocor	Anti-CD80 MAb P7C10 -- ID Vaccine
Anti-CD3-anti-SCLC bispecific MAb	Anti-CD8-idarubicin conjugate
Anti-CD4 idiotype vaccine	Anti-CEA MAb CE-25
Anti-CD4 MAb -- Centocor, IDEC Pharmaceuticals, Xenova Group	Anti-CEA MAb MN 14 -- Immunomedics
Anti-CD4 MAb 16H5	Anti-CEA MAb MN14-PE40 conjugate -- Immunomedics
Anti-CD4 MAb 4162W94 -- GlaxoSmithKline	Anti-CEA MAb T84.66-interleukin-2 conjugate
Anti-CD4 MAb B-F5 -- Diaclone	Anti-CEA sheep MAb -- KS Biomedix Holdings
Anti-CD4 MAb GK1-5	

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- Anti-cell surface monoclonal antibodies -- Cambridge Antibody Tech. /Pharmacia  
 Anti-c-erbB2-anti-CD3 bifunctional MAb -- Otsuka  
 Anti-CMV MAb -- Scotgen  
 Anti-CTLA-4 MAb  
 Anti-EGFR catalytic antibody -- Hesel Biomed  
 anti-EGFR immunotoxin -- IVAX  
 Anti-EGFR MAb -- Abgenix  
 Anti-EGFR MAb 528  
 Anti-EGFR MAb KSB 107 -- KS Biomedix  
 Anti-EGFR MAb-DM1 conjugate -- ImmunoGen  
 Anti-EGFR MAb-LA1 --  
 Anti-EGFR sheep MAb -- KS Biomedix  
 Anti-FAP MAb F19-I-131  
 Anti-Fas IgM MAb CH11  
 Anti-Fas MAb Jo2  
 Anti-Fas MAb RK-8  
 Anti-Flt-1 monoclonal antibodies -- ImClone  
 Anti-fungal peptides -- State University of New York  
 antifungal tripeptides -- BTG  
 Anti-ganglioside GD2 antibody-interleukin-2 fusion protein -- Lexigen  
 Anti-GM2 MAb -- Kyowa  
 Anti-GM-CSF receptor monoclonal antibodies -- AMRAD  
 Anti-gp130 MAb -- Tosoh  
 Anti-HCA monoclonal antibodies -- AltaRex/Epigen  
 Anti-hCG antibodies -- Abgenix/AVI BioPharma  
 Anti-heparanase human monoclonal antibodies -- Oxford Glycosciences/Medarex  
 Anti-hepatitis C virus human monoclonal antibodies -- XTL Biopharmaceuticals  
 Anti-HER-2 antibody gene therapy  
 Anti-herpes antibody -- Epicyte  
 Anti-HIV antibody -- Epicyte  
 anti-HIV catalytic antibody -- Hesel Biomed  
 anti-HIV fusion protein -- Idun  
 anti-HIV proteins -- Cangene  
 Anti-HM1-24 MAb -- Chugai  
 Anti-hR3 MAb  
 Anti-Human-Carcinoma-Antigen MAb -- Epicyte  
 Anti-ICAM-1 MAb -- Boehringer Ingelheim  
 Anti-ICAM-1 MAb 1A-29 -- Pharmacia  
 Anti-ICAM-1 MAb HA58  
 Anti-ICAM-1 MAb YN1/1.7.4  
 Anti-ICAM-3 MAb ICM3 -- ICOS  
 Anti-idiotypic breast cancer vaccine 11D10  
 Anti-idiotypic breast cancer vaccine ACA14C5 --  
 Anti-idiotypic cancer vaccine -- ImClone Systems/Merck KGaA ImClone, Viventia Biotech  
 Anti-idiotypic cancer vaccine 1A7 -- Titan  
 Anti-idiotypic cancer vaccine 3H1 -- Titan  
 Anti-idiotypic cancer vaccine TriAb -- Titan  
 Anti-idiotypic Chlamydia trachomatis vaccine  
 Anti-idiotypic colorectal cancer vaccine -- Novartis  
 Anti-idiotypic colorectal cancer vaccine -- Onyvax  
 Anti-idiotypic melanoma vaccine -- IDEC Pharmaceuticals  
 Anti-idiotypic ovarian cancer vaccine ACA 125  
 Anti-idiotypic ovarian cancer vaccine AR54 - AltaRex  
 Anti-idiotypic ovarian cancer vaccine CA-125 -- AltaRex, Biomira  
 Anti-IgE catalytic antibody -- Hesel Biomed  
 Anti-IgE MAb E26 -- Genentech  
 Anti-IGF-1 MAb  
 anti-inflammatory -- GeneMax  
 anti-inflammatory peptide -- BTG

## FIG. 1D

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anti-integrin peptides -- Burnha	Anti-mu MAb -- Novartis
Anti-interferon-alpha-receptor MAb 64G12 -- Pharma Pacific Management	Anti-MUC-1 MAb
Anti-interferon-gamma MAb -- Protein Design Labs	Anti-Nogo-A MAb IN1
Anti-interferon-gamma polyclonal antibody -- - Dompe	Anti-nuclear autoantibodies -- Procyon
- Advanced Biotherapy	Anti-ovarian cancer monoclonal antibodies --
Anti-interleukin-10 MAb --	Anti-p185 monoclonal antibodies
Anti-interleukin-12 MAb --	Anti-p43 MAb
Anti-interleukin-1-beta polyclonal antibody -- R&D Systems	Antiparasitic vaccines
Anti-interleukin-2 receptor MAB 2A3	Anti-PDGF/bFGF sheep MAb -- KS Biomedix
Anti-interleukin-2 receptor MAB 33B3-1 -- Immunotech	Anti-properdin monoclonal antibodies -- Abgenix/Gliatech
Anti-interleukin-2 receptor MAB ART-18	Anti-PSMA MAB J591 -- BZL Biologics
Anti-interleukin-2 receptor MAB LO-Tact-1	Anti-Rev MAB gene therapy --
Anti-interleukin-2 receptor MAB Mikbeta1	Anti-RSV antibodies -- Epicyte, Intracell
Anti-interleukin-2 receptor MAB NDS61	Anti-RSV monoclonal antibodies -- Medarex/MedImmune, Applied Molecular Evolution/MedImmune
Anti-interleukin-4 MAB 11B11	Anti-RSV MAB, inhalation -- Alkermes/MedImmune
Anti-interleukin-5 MAB -- Wallace Laboratories	Anti-RT gene therapy
Anti-interleukin-6 MAB -- Centocor, Diacione, Pharmadigm	Antisense K-ras RNA gene therapy
Anti-interleukin-8 MAB -- Xenotech	Anti-SF-25 MAB
Anti-JL1 MAB	Anti-sperm antibody -- Epicyte
Anti-Klebsiella sheep MAB -- KS Biomedix Holdings	Anti-Tac(Fv)-PE38 conjugate
Anti-Laminin receptor MAB-liposomal doxorubicin conjugate	Anti-TAPA/CD81 MAB AMP1
Anti-LCG MAB -- Cytoclonal	Anti-tat gene therapy
Anti-lipopopolysaccharide MAB -- VitaResc	Anti-TCR-alpha-beta MAB H57-597
Anti-L-selectin monoclonal antibodies -- Protein Design Labs, Abgenix, Stanford University	Anti-TCR-alpha-beta MAB R73
Anti-MBL monoclonal antibodies -- Alexion/Brigham and Women's Hospital	Anti-tenascin MAB BC-4-l-131
Anti-MHC monoclonal antibodies	Anti-TGF-beta human monoclonal antibodies -- Cambridge Antibody Tech., Genzyme
Anti-MIF antibody humanised -- IDEC, Cytokine PharmaSciences	Anti-TGF-beta MAB 2G7 -- Genentech
Anti-MRSA/VRSA sheep MAB -- KS Biomedix Holdings	Anti-thrombin III -- Genzyme Transgenics, Aventis, Bayer, Behringwerke, CSL, Myriad
	Anti-Thy1 MAB
	Anti-Thy1.1 MAB

FIG. 1E

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Anti-tissue factor/factor VIIA sheep MAb -- KS Biomedix  
 Anti-TNF monoclonal antibodies -- Centocor, Chiron, Peptech, Pharacia, Serono  
 Anti-TNF sheep MAb -- KS Biomedix Holdings  
 Anti-TNFalpha MAb -- Genzyme  
 Anti-TNFalpha MAb B-C7 -- Diaclone  
 Anti-tooth decay MAb -- Planet BioTech.  
 antitumour RNases -- NIH  
 Anti-VCAM MAb 2A2 -- Alexion  
 Anti-VCAM MAb 3F4 -- Alexion  
 Anti-VCAM-1 MAb  
 Anti-VEC MAb -- ImClone  
 Anti-VEGF MAb -- Genentech  
 Anti-VEGF MAb 2C3  
 Anti-VEGF sheep MAb -- KS Biomedix Holdings  
 Anti-VLA-4 MAb HP1/2 -- Biogen  
 Anti-VLA-4 MAb PS/2  
 Anti-VLA-4 MAb R1-2  
 Anti-VLA-4 MAb TA-2  
 Anti-VRE sheep MAb -- KS Biomedix Holdings  
 ANUP -- TranXenoGen  
 ANUP-1 -- Pharis  
 AOP-RANTES -- Senetek  
 Apan-CH -- Praeclis Pharmaceuticals  
 APC-8024 -- Demegen  
 ApoA-1 -- Milano, Pharmacia  
 Apogen -- Alexion  
 apolipoprotein A1 -- Avanir  
 Apolipoprotein E -- Bio-Tech. General  
 Applaggin -- Biogen  
 aprotinin -- ProdiGene  
 APT-070C -- AdProTech  
 AR 177 -- Aronex Pharmaceuticals  
 AR 209 -- Aronex Pharmaceuticals, Antigenics  
 AR545C  
 ARGENT gene delivery systems -- ARIAD  
 Arresten  
 ART-123 -- Asahi Kasei  
 arylsulfatase B -- BioMarin  
 Arylsulfatase B, Recombinant human -- BioMarin  
 AS 1051 -- Ajinomoto  
 ASI-BCL -- Intracell  
 ATL-101 -- Alizyme  
 atrial natriuretic peptide -- Pharis  
 Aurintricarboxylic acid-high molecular weight  
 autoimmune disorders -- GPC  
 Biotech/MorphoSys  
 Autoimmune disorders and transplant rejection -- Bristol-Myers Squibb/Genzyme  
 Tra  
 Autoimmune disorders/cancer -- Abgenix/Chiron, /CuraGen  
 Autotaxin  
 Avidin -- NeoRx  
 axogenesis factor-1 -- Boston Life Sciences  
 Axokine -- Regeneron  
 B cell lymphoma vaccine -- Biomira  
 B7-1 gene therapy -- BABS proteins -- Chiron  
 BAM-002 -- Novelos Therapeutics  
 Bay-16-9996 -- Bayer  
 Bay-39-9437 -- Bayer  
 Bay-50-4798 -- Bayer  
 BB-10153 -- British Biotech  
 BBT-001 -- Bolder BioTech.  
 BBT-002 -- Bolder BioTech.  
 BBT-003 -- Bolder BioTech.  
 BBT-004 -- Bolder BioTech.  
 BBT-005 -- Bolder BioTech.  
 BBT-006 -- Bolder BioTech.  
 BBT-007 -- Bolder BioTech.  
 BCH-2763 -- Shire  
 BCSF -- Millenium Biologix  
 BDNF -- Regeneron -- Amgen

FIG. 1F

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Becaplermin -- Johnson & Johnson, Chiron  
 Bectumomab -- Immunomedics  
 Beta-adrenergic receptor gene therapy --  
 University of Arkansas  
 BI 51013 -- Behringwerke AG  
 BIBH 1 -- Boehringer Ingelheim  
 BIM-23190 -- Beaufour-Ipsen  
 birch pollen immunotherapy -- Pharmacia  
 bispecific fusion proteins -- NIH  
 Bispecific Mab 2B1 -- Chiron  
 Bitistatin  
 BIWA 4 -- Boehringer Ingelheim  
 blood substitute -- Northfield, Baxter Intl.  
 BLP-25 -- Biomira  
 BLS-0597 -- Boston Life Sciences  
 BLYS -- Human Genome Sciences  
 BLYS radiolabelled -- Human Genome  
 Sciences  
 BM 06021 -- Boehringer Mannheim  
 BM-202 -- BioMarin  
 BM-301 -- BioMarin  
 BM-301 -- BioMarin  
 BM-302 -- BioMarin  
 BMP 2 -- Genetics Institute/Medtronic-  
 Sofamor Danek, Genetics Institute/  
 Collagenesis, Genetics  
 Institute/Yamanouch  
 BMP 2 gene therapy  
 BMP 52 -- Aventis Pasteur, Biopharm  
 BMP-2 -- Genetics Institute  
 BMS 182248 -- Bristol-Myers Squibb  
 BMS 202448 -- Bristol-Myers Squibb  
 bone growth factors -- IsoTis  
 BPC-15 -- Pfizer  
 brain natriuretic peptide --  
 Breast cancer -- Oxford  
 GlycoSciences/Medarex  
 Breast cancer vaccine -- Therion Biologics,  
 Oregon  
 BSSL -- PPL Therapeutics  
 BST-2001 -- BioStratum  
 BST-3002 -- BioStratum  
 BTI 322 --  
 butyrylcholinesterase -- Shire  
 C 6822 -- COR Therapeutics  
 C1 esterase inhibitor -- Pharming  
 C3d adjuvant -- AdProTech  
 CAB-2.1 -- Millennium  
 calcitonin -- Inhale Therapeutics Systems,  
 Aventis, Genetronics, TranXenoGen,  
 Unigene, Rhone Poulenc Rohrer  
 calcitonin -- oral -- Nobex, Emisphere,  
 Pharmaceutical Discovery  
 Calcitonin gene-related peptide -- Asahi  
 Kasei -- Unigene  
 calcitonin, human -- Suntory  
 calcitonin, nasal -- Novartis, Unigene  
 calcitonin, Panoderm -- Elan  
 calcitonin, Peptitol -- Shire  
 calcitonin, salmon -- Therapicon  
 calin -- Biopharm  
 Calphobindin I  
 calphobindin I -- Kowa  
 calreticulin -- NYU  
 Campath-1G  
 Campath-1M  
 cancer therapy -- Cangene  
 cancer vaccine -- Aixlie, Aventis Pasteur,  
 Center of Molecular Immunology, YM  
 BioSciences, Cytos, Genzyme,  
 Transgenics, GlobeImmune, Igeneon,  
 ImClone, Virogenetics, InterCell, Iomai,  
 Jenner Biotherapies, Memorial Sloan-  
 Kettering Cancer Center, Sydney Kimmel  
 Cancer Center, Novavax, Protein  
 Sciences, Argonex, SIGA  
 Cancer vaccine ALVAC-CEA B7.1 --  
 Aventis Pasteur/Therion Biologics  
 Cancer vaccine CEA-TRICOM -- Aventis  
 Pasteur/Therion Biologics  
 Cancer vaccine gene therapy -- Cantab  
 Pharmaceuticals

FIG. 1G

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Cancer vaccine HER-2/neu -- Corixa	CETP vaccine -- Avant
Cancer vaccine THERATOPE -- Biomira	Cetorelix
cancer vaccine, PolyMASC -- Valentis	Cetuximab
Candida vaccine -- Corixa, Inhibitex	CGH 400 -- Novartis
Canstatin -- ILEX	CGP 42934 -- Novartis
CAP-18 -- Panorama	CGP 51901 -- Tanox
Cardiovascular gene therapy -- Collateral Therapeutics	CGRP -- Unigene
carperitide -- Suntory	CGS 27913 -- Novartis
Casocidin-1 -- Pharis	CGS 32359 -- Novartis
CAT 152 -- Cambridge Antibody Tech.	Chagas disease vaccine -- Corixa
CAT 192 -- Cambridge Antibody Tech.	chemokines -- Immune Response
CAT 213 -- Cambridge Antibody Tech.	CHH 380 -- Novartis
Catalase -- Enzo	chitinase -- Genzyme, ICOS
Cat-PAD -- Circassia	Chlamydia pneumoniae vaccine -- Antex Biologics
CB 0006 -- Celltech	Chlamydia trachomatis vaccine -- Antex Biologics
CCK(27-32) -- Akzo Nobel	Chlamydia vaccine -- GlaxoSmithKline
CCR2-641 -- NIH	Cholera vaccine CVD 103-HgR -- Swiss Serum and Vaccine Institute Berne
CD, Procept -- Paligent	Cholera vaccine CVD 112 -- Swiss Serum and Vaccine Institute Berne
CD154 gene therapy	Cholera vaccine inactivated oral -- SBL Vaccin
CD39 -- Immunex	Chrysalin -- Chrysalis BioTech.
CD39-L2 -- Hyseq	CI-782 -- Hitachi Kase
CD39-L4 -- Hyseq	Ciliary neurotrophic factor -- Fidia, Roche
CD4 fusion toxin -- Senetek	CIM project -- Active Biotech
CD4 IgG -- Genentech	CL 329753 -- Wyeth-Ayerst
CD4 receptor antagonists -- Pharmacopeia/Progenics	CL22, Cobra -- ML Laboratories
CD4 soluble -- Progenics	Clenoliximab -- IDEC
CD4, soluble -- Genzyme Transgenics	Clostridium difficile antibodies -- Epicyte
CD40 ligand -- Immunex	clotting factors -- Octagene
CD4-ricin chain A -- Genentech	CMB 401 -- Celltech
CD59 gene therapy -- Alexion	CNTF -- Sigma-Tau
CD8 TIL cell therapy -- Aventis Pasteur	Cocaine abuse vaccine -- Cantab, ImmuLogic, Scripps
CD8, soluble -- Avidex	coccidiomycosis vaccine -- Arizo
CD95 ligand -- Roche	collagen -- Type I -- Pharming
CDP 571 -- Celltech	Collagen formation inhibitors -- FibroGen
CDP 850 -- Celltech	
CDP 870 -- Celltech	
CDS-1 -- Ernest Orlando	
Cedelizumab -- Ortho-McNeil	
Cetermin -- Insmed	

FIG. 1H



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Collagen/hydroxyapatite/bone growth factor	CY 1747 -- Epimmune
-- Aventis Pasteur, Biopharm, Orquest	CY 1748 -- Epimmune
collagenase -- BioSpecifics	Cyanovirin-N
Colorectal cancer vaccine -- Wistar Institute	Cystic fibrosis therapy -- CBR/IVAX
Component B, Recombinant -- Serono	CYT 351
Connective tissue growth factor inhibitors --	cytokine Traps -- Regeneron
FibroGen/Taisho	cytokines -- Enzon, Cytoconal
Contortrostatin	Cytomegalovirus glycoprotein vaccine --
contraceptive vaccine -- Zonagen	Chiron, Aquila Biopharmaceuticals,
Contraceptive vaccine hCG	Aventis Pasteur, Virogenetics
Contraceptive vaccine male reversible --	Cytomegalovirus vaccine live -- Aventis
IMMUCON	Pasteur
Contraceptive vaccine zona pellucida --	Cytosine deaminase gene therapy --
Zonagen	GlaxoSmithKline
Copper-64 labelled MAb TETA-1A3 -- NCI	DA-3003 -- Dong-A
Coralyne	DAB389interleukin-6 -- Senetek
Corsevin M	DAB389interleukin-7
C-peptide analogues -- Schwarz	DAMP <sup>A</sup> -- Incyte Genomics
CPI-1500 -- Consensus	Daniplestim -- Pharmacia
CRF -- Neurobiological Tech.	darbepoetin alfa -- Amgen
cRGDFV pentapeptide --	DBI-3019 -- Diabetogen
CRL 1095 -- CytRx	DCC -- Genzyme
CRL 1336 -- CytRx	DDF -- Hyseq
CRL 1605 -- CytRx	decorin -- Integra, Telios
CS-560 -- Sankyo	defensins -- Large Scale Biology
CSF -- ZymoGenetics	DEGR-VIIa
CSF-G -- Hangzhou, Dong-A, Hanmi	Delimmunised antibody 3B6/22 AGEN
CSF-GM -- Cangene, Hunan, LG Chem	Deimmunised anti-cancer antibodies --
CSF-M -- Zarix	Biovation/Viragen
CT 1579 -- Merck Frosst	Dendroamide A
CT 1786 -- Merck Frosst	Dengue vaccine -- Bavarian Nordic, Merck
CT-112 <sup>A</sup> -- BTG	denileukin difitox -- Ligand
CTB-134L -- Xenova	DES-1101 -- Desmos
CTC-111 -- Kaketsuken	desirudin -- Novartis
CTGF -- FibroGen	desmopressin -- Unigene
CTLA4-Ig -- Bristol-Myers Squibb	Desmoteplase -- Merck, Schering AG
CTLA4-Ig gene therapy --	Destabilase
CTP-37 -- AVI BioPharma	Diabetes gene therapy -- DeveloGen, Pfizer
C-type natriuretic peptide -- Suntory	Diabetes therapy -- Crucell
CVS 995 -- Corvas Int'l.	Diabetes type 1 vaccine -- Diamyd
CX 397 -- Nikko Kyodo	Therapeutics

FIG. 11

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DiaCIM -- YM BioSciences  
 dialytic oligopeptides -- Research Corp  
 Diamyd -- Diamyd Therapeutics  
 DiaPep227 -- Pepgen  
 DiavaX -- Corixa  
 Diphtheria tetanus pertussis-hepatitis B vaccine -- GlaxoSmithKline  
 DIR therapy -- Solis Therapeutics --  
 DNase -- Genentech  
 Dornase alfa -- Genentech  
 Dornase alfa, inhalation -- Genentech  
 Doxorubicin-anti-CEA MAb conjugate -- Immunomedics  
 DP-107 -- Trimeris  
 drotrecogin alfa -- Eli Lilly  
 DTctGMCSF  
 DTP-polio vaccine -- Aventis Pasteur  
 DU 257-KM231 antibody conjugate -- Kyowa  
 dural graft matrix -- Integra  
 Duteplase -- Baxter Intl.  
 DWP-401 -- Daewoong  
 DWP-404 -- Daewoong  
 DWP-408 -- Daewoong  
 E coli O157 vaccine -- NIH  
 E21-R -- BresaGen  
 Eastern equine encephalitis virus vaccine --  
 Echicetin --  
 Echinhibin 1 --  
 Echistatin -- Merck  
 Echitamine --  
 EC-SOD -- PPL Therapeutics  
 EDF -- Ajinomoto  
 EDN derivative -- NIH  
 EDNA -- NIH  
 Edobacomab -- XOMA  
 Edrecolomab -- Centocor  
 EF 5077  
 Efalizumab -- Genentech  
 EGF fusion toxin -- Seragen, Ligand  
 EGF-P64k vaccine -- Center of Molecular Immunology  
 EL 246 -- LigoCyte  
 elastase inhibitor -- Synergen  
 elcatonin -- Therapicon  
 EMD 72000 -- Merck KGaA  
 Emdogain -- BIORA  
 emfilmerin -- AMRAD  
 Emoctakin -- Novartis  
 enamel matrix protein -- BIORA  
 Endo III -- NYU  
 endostatin -- EntreMed, Pharis  
 Enhancins -- Micrologix  
 Enlimomab -- Isis Pharm.  
 Enoxaparin sodium -- Pharmuka  
 enzyme linked antibody nutrient depletion therapy -- KS Biomedix Holdings  
 Eosinophil-derived neutralizing agent --  
 EP-51216 -- Asta Medica  
 EP-51389 -- Asta Medica  
 EPH family ligands -- Regeneron  
 Epidermal growth factor -- Hitachi Kasei, Johnson & Johnson  
 Epidermal growth factor fusion toxin -- Senetek  
 Epidermal growth factor-genistein --  
 EPI-HNE-4 -- Dyax  
 EPI-KAL2 -- Dyax  
 Epoetin-alfa -- Amgen, Dragon Pharmaceuticals, Nanjing Huaxin  
 Epratuzumab -- Immunomedics  
 Epstein-Barr virus vaccine -- Aviron/SmithKline Beecham, Bioresearch  
 Eptacog alfa -- Novo Nordisk  
 Eptifibatide -- COR Therapeutics  
 erb-38 --  
 Erlizumab -- Genentech

FIG. 1J

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erythropoietin -- Alkermes, ProLease, Dong-Fas TR -- Human Genome Sciences  
 A, Elanex, Genetics Institute, LG Chem,  
 Protein Sciences, Serono, Snow Brand,  
 SRC VB VECTOR, Transkaryotic  
 Therapies  
 Erythropoietin Beta -- Hoffman La Roche  
 Erythropoietin/Epoetin alfa -- Chugai  
 Escherichia coli vaccine -- North American  
 Vaccine, SBL Vaccin, Swiss Serum and  
 Vaccine Institute Berne  
 etanercept -- Immunex  
 examorelin -- Mediolanum  
 exonuclease VII  
 F 105 -- Centocor  
 F-992 -- Fornix  
 Factor IX -- Alpha Therapeutics, Welfide  
 Corp., CSL, Genetics Institute/AHP,  
 Pharmacia, PPL Therapeutics  
 Factor IX gene therapy -- Cell Genesys  
 Factor VII -- Novo Nordisk, Bayer, Baxter  
 Intl.  
 Factor VIIa -- PPL Therapeutics,  
 ZymoGenetics  
 Factor VIII -- Bayer Genentech, Beaufour-  
 Ipsen, CLB, Inex, Octagen, Pharmacia,  
 Pharming  
 Factor VIII -- PEGylated -- Bayer  
 Factor VIII fragments -- Pharmacia  
 Factor VIII gene therapy -- Targeted  
 Genetics  
 Factor VIII sucrose formulation -- Bayer,  
 Genentech  
 Factor VIII-2 -- Bayer  
 Factor VIII-3 -- Bayer  
 Factor Xa inhibitors -- Merck, Novo Nordisk,  
 Mochida  
 Factor XIII -- ZymoGenetics  
 Factors VIII and IX gene therapy -- Genetics  
 Institute/Targeted Genetics  
 Famoxin -- Genset  
 Fas (delta) TM protein -- LXR BioTech.  
 Felvizumab -- Scotgen  
 FFR-VIIa -- Novo Nordisk  
 FG-001 -- F-Gene  
 FG-002 -- F-Gene  
 FG-004 -- F-Gene  
 FG-005 -- F-Gene  
 FGF + fibrin -- Repair  
 Fibrimage -- Bio-Tech. General  
 fibrin-binding peptides -- ISIS Innovation  
 fibrinogen -- PPL Therapeutics, Pharming  
 fibroblast growth factor -- Chiron, NYU,  
 Ramot, ZymoGenetics  
 fibrolase conjugate -- Schering AG  
 Filgrastim -- Amgen  
 filgrastim -- PDA modified -- Xencor  
 FLT-3 ligand -- Immunex  
 FN18 CRM9 --  
 follistatin -- Biotech Australia, Human  
 Therapeutics  
 follitropin alfa -- Alkermes, ProLease,  
 PowderJect, Serono, Akzo Nobel  
 Follitropin Beta -- Bayer, Organon  
 FP 59  
 FSH -- Ferring  
 FSH + LH -- Ferring  
 F-spondin -- CeNeS  
 fusion protein delivery system -- UAB  
 Research Foundation  
 fusion toxins -- Boston Life Sciences  
 G 5598 -- Genentech  
 GA-II -- Transkaryotic Therapies  
 Gamma-interferon analogues -- SRC VB  
 VECTOR  
 Ganirelix -- Roche  
 gastric lipase -- Meristem  
 Gavilimomab --  
 G-CSF -- Amgen, SRC VB VECTOR  
 GDF-1 -- CeNeS  
 GDF-5 -- Biopharm  
 GDNF -- Amgen

FIG. 1K

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gelsolin -- Biogen  
 Gemtuzumab ozogamicin -- Celltech  
 Gene-activated epoetin-alfa -- Aventis  
 Pharma -- Transkaryotic Therapies  
 Glanzmann thrombasthenia gene therapy --  
 Glatiramer acetate -- Yeda  
 glial growth factor 2 -- CeNeS  
 GLP-1 -- Amylin, Suntory, TheraTech,  
 Watson  
 GLP-1 peptide analogues -- Zealand  
 Pharmaceuticals  
 glucagon -- Eli Lilly, ZymoGenetics  
 Glucagon-like peptide-1 7-36 amide --  
 Suntory  
 Glucocerebrosidase -- Genzyme  
 glutamate decarboxylase -- Genzyme  
 Transgenics  
 Glycoprotein S3 -- Kureha  
 GM-CSF -- Immunex  
 GM-CSF tumour vaccine -- PowderJect  
 GnRH immunotherapeutic -- Protherics  
 gp75 antigen -- ImClone  
 gp96 -- Antigenics  
 GPI 0100 -- Galenica  
 GR 4991W93 -- GlaxoSmithKline  
 Granulocyte colony-stimulating factor --  
 Dong-A  
 Granulocyte colony-stimulating factor  
 conjugate  
 grass allergy therapy -- Dynavax  
 GRF1-44 -- ICN  
 Growth Factor -- Chiron, Atrigel, Atrix,  
 Innogenetics, ZymoGenetics, Novo  
 growth factor peptides -- Biotherapeutics  
 growth hormone -- LG Chem  
 growth hormone, Recombinant human --  
 SeroNo  
 GT 4086 -- Gliatech  
 GW 353430 -- GlaxoSmithKline  
 GW-278884 -- GlaxoSmithKline  
 H 11 -- Viventia Biotech  
 H5N1 influenza A virus vaccine -- Protein  
 Sciences  
 haemoglobin -- Biopure  
 haemoglobin 3011, Recombinant -- Baxter  
 Healthcare  
 haemoglobin crosfumaril -- Baxter Intl.  
 haemoglobin stabilized -- Ajinomoto  
 haemoglobin, recombinant -- Apex  
 HAF -- Immune Response  
 Hantavirus vaccine  
 HB 19  
 HBNF -- Regeneron  
 HCC-1 -- Pharis  
 hCG -- Milkhaus  
 hCG vaccine -- Zonagen  
 HE-317 -- Hollis-Eden Pharmaceuticals  
 Heat shock protein cancer and influenza  
 vaccines -- StressGen  
 Helicobacter pylori vaccine -- Acambis,  
 AstraZeneca/CSL, Chiron, Provalis  
 Helistat-G -- GalaGen  
 Hemolink -- Hemosol  
 hepapoietin -- Snow Brand  
 heparanase -- InSight  
 heparinase I -- Ibex  
 heparinase III -- Ibex  
 Hepatitis A vaccine -- American Biogenetic  
 Sciences  
 Hepatitis A vaccine inactivated  
 Hepatitis A vaccine Nothav -- Chiron  
 Hepatitis A-hepatitis B vaccine --  
 GlaxoSmithKline  
 hepatitis B therapy -- Tripep  
 Hepatitis B vaccine -- Amgen, Chiron SpA,  
 Meiji Milk, NIS, Prodeva, PowderJect,  
 Rhein Biotech  
 Hepatitis B vaccine recombinant -- Evans  
 Vaccines, Epitex Combiotech, Genentech,  
 MedImmune, Merck Sharp & Dohme,  
 Rhein Biotech, Shantha Biotechnics,  
 Vector, Yeda

FIG. 1L

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- Hepatitis B vaccine recombinant TGP 943 -- HIV peptides -- American Home Products  
Takeda  
HIV vaccine -- Applied bioTech., Axis  
Genetics, Biogen, Bristol-Myers Squibb,  
Genentech, Korea Green Cross, NIS,  
Oncogen, Protein Sciences Corporation,  
Terumo, Tonen Corporation, Wyeth-  
Ayerst, Wyeth-Lederle Vaccines-Malvern,  
Advanced BioScience Laboratories,  
Bavarian Nordic, Bavarian Nordic/Statens  
Serum Institute, GeneCure, Immune  
Response, Progenics, Theron Biologics,  
United Biomedical, Chiron
- Hepatitis C vaccine -- Bavarian Nordic,  
Chiron, Innogenetics Acambis,  
Hepatitis D vaccine -- Chiron Vaccines  
Hepatitis E vaccine recombinant --  
Genelabs/GlaxoSmithKline, Novavax  
hepatocyte growth factor -- Panorama,  
Sosei  
hepatocyte growth factor kringle fragments -  
- EntrelMed  
Her-2/Neu peptides -- Corixa  
Herpes simplex glycoprotein DNA vaccine -- HIV vaccine vCP1433 -- Aventis Pasteur  
Merck, Wyeth-Lederle Vaccines-Malvern,  
Genentech, GlaxoSmithKline, Chiron,  
Takeda  
HIV vaccine vCP1452 -- Aventis Pasteur  
HIV vaccine vCP205 -- Aventis Pasteur  
HL-9 -- American BioScience  
HM-9239 -- Cytran  
HML-103 -- Hemosol  
HML-104 -- Hemosol  
HML-105 -- Hemosol  
HML-109 -- Hemosol  
HML-110 -- Hemosol  
HML-121 -- Hemosol  
hNLP -- Pharis  
Hookworm vaccine  
host-vector vaccines -- Henogen
- Herpes simplex vaccine -- Cantab  
Pharmaceuticals, CEL-SCI, Henderson  
Morley  
Herpes simplex vaccine live -- ImClone  
Systems/Wyeth-Lederle, Aventis Pasteur  
HGF derivatives -- Dompe  
hiAPP vaccine -- Crucell  
Hib-hepatitis B vaccine -- Aventis Pasteur  
HIC 1  
HIP -- Altachem  
Hirudins -- Biopharma, Cangene, Dongkook,  
Japan Energy Corporation, Pharmacia  
Corporation, SIR International, Sanofi-  
Synthelabo, Sotragene, Rhein Biotech  
HIV edible vaccine -- ProdiGene  
HIV gp120 vaccine -- Chiron, Ajinomoto,  
GlaxoSmithKline, ID Vaccine, Progenics,  
VaxGen  
HIV gp120 vaccine gene therapy --  
HIV gp160 DNA vaccine -- PowderJect,  
Aventis Pasteur, Oncogen, Hyland  
Immuno, Protein Sciences  
HIV gp41 vaccine -- Panacos  
HIV HGP-30W vaccine -- CEL-SCI  
HIV immune globulin -- Abbott, Chiron
- HPM 1 -- Chugai  
HPV vaccine -- MediGene  
HSA -- Meristem  
HSF -- StressGen  
HSP carriers -- Weizmann, Yeda, Peptor  
HSPPC-70 -- Antigenics  
HSPPC-96 -- pathogen-derived --  
Antigenics  
HSV 863 -- Novartis  
HTLV-I DNA vaccine  
HTLV-I vaccine  
HTLV-II vaccine -- Access  
HU 901 -- Tanox  
Hu23F2G -- ICOS  
HuHMF61

FIG. 1M

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HumaLYM -- Intracell	HuMax-IL15 -- Genmab
Human krebs statika -- Yamanouchi	HYB 190 -- Hybridon
human monoclonal antibodies --	HYB 676 -- Hybridon
Abgenix/Biogen, Abgenix/ Corixa,	I-125 Mab A33 -- Celltech
Abgenix/ImmuneX, Abgenix/Lexicon,	Ibritumomab tiuxetan -- IDEC
Abgenix/ Pfizer, Athersys/Medarex,	IBT-9401 -- Ibex
Biogen/MorphoSys, CAT/Searle,	IBT-9402 -- Ibex
Centocor/Medarex, Corixa/Kirin Brewery,	IC 14 -- ICOS
Corixa/Medarex, Eos BioTech./Medarex,	Idarubicin anti-Ly-2.1 --
Eos/Xenerex, Exelixis/Protein Design	IDEC 114 -- IDEC
Labs, ImmunoGen/ Raven,	IDEC 131 -- IDEC
Medarex/B.Twelve,	IDEC 152 -- IDEC
MorphoSys/ImmunoGen, XTL	IDM 1 -- IDM
Biopharmaceuticals/Dyax,	IDPS -- Hollis-Eden Pharmaceuticals
Human monoclonal antibodies --	iduronate-2-sulfatase -- Transkaryotic
Medarex/Northwest Biotherapeutics,	Therapies
Medarex/Seattle Genetics	IGF/IBP-2-13 -- Pharis
human netrin-1 -- Exelixis	IGN-101 -- Igeneon
human papillomavirus antibodies -- Epicyte	IK HIR02 -- Iketon
Human papillomavirus vaccine -- Biotech	IL-11 -- Genetics Institute/AHP
Australia, IDEC, StressGen	IL-13-PE38 -- NeoPharm
Human papillomavirus vaccine MEDI 501 --	IL-17 receptor -- ImmuneX
MedImmune/GlaxoSmithKline	IL-18BP -- Yeda
Human papillomavirus vaccine MEDI	IL-1Hy1 -- Hyseq
503/MEDI 504 --	IL-1B -- Celltech
MedImmune/GlaxoSmithKline	IL-1B adjuvant -- Celltech
Human papillomavirus vaccine TA-CIN --	IL-2 -- Chiron
Cantab Pharmaceuticals	IL-2 + IL-12 -- Hoffman La-Roche
Human papillomavirus vaccine TA-HPV --	IL-6/sIL-6R fusion -- Hadasit
Cantab Pharmaceuticals	IL-6R derivative -- Tosoh
Human papillomavirus vaccine TH-GW --	IL-7-Dap 389 fusion toxin -- Ligand
Cantab/GlaxoSmithKline	IM-862 -- Cytran
human polyclonal antibodies -- Biosite/Eos	IMC-1C11 -- ImClone
BioTech./ Medarex	imiglucerase -- Genzyme
human type II anti factor VIII monoclonal	Immune globulin intravenous (human) --
antibodies -- ThromboGenics	Hoffman La Roche
humanised anti glycoprotein Ib murine	immune privilege factor -- Proneuron
monoclonal antibodies -- ThromboGenics	Immunocal -- Immunotec
HumaRAD -- Intracell	Immunogene therapy -- Briana Bio-Tech
HuMax EGFR -- Genmab	Immunoliposomal 5-fluorodeoxyuridine-
HuMax-CD4 -- Medarex	dipalmitate --

FIG. 1N

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immunosuppressant vaccine -- Aixlie  
 immunotoxin -- Antisoma, NIH  
 ImmuRAIT-Re-188 -- Immunomedics  
 imreg-1 -- Imreg  
 infertility -- Johnson & Johnson, E-TRANS  
 Influenza virus vaccine -- Aventis Pasteur,  
   Protein Sciences  
 inhibin -- Biotech Australia, Human  
   Therapeutics  
 Inhibitory G protein gene therapy  
 INKP-2001 -- InKine  
 Inolimomab -- Diaclone  
 insulin -- AutoImmune, Altea, Biobras,  
   BioSante, Bio-Tech. General, Chong Kun  
   Dang, Emisphere, Flamel, Provalis, Rhein  
   Biotech, TranXenoGen  
 insulin (bovine) -- Novartis  
 insulin analogue -- Eli Lilly  
 Insulin Aspart -- Novo Nordisk  
 insulin detemir -- Novo Nordisk  
 insulin glargine -- Aventis  
 insulin inhaled -- Inhale Therapeutics  
   Systems, Alkermes  
 insulin oral -- Inovax  
 insulin, AeroDose -- AeroGen  
 insulin, AERx -- Aradigm  
 insulin, BEODAS -- Elan  
 insulin, Biphax -- Helix  
 insulin, buccal -- Generex  
 insulin, i2R -- Flemington  
 insulin, intranasal -- Bentley  
 insulin, oral -- Nobex, Unigene  
 insulin, Orasome -- Endorex  
 insulin, ProMaxx -- Epic  
 insulin, Quadrant -- Elan  
 insulin, recombinant -- Aventis  
 insulin, Spiros -- Elan  
 insulin, Transfersome -- IDEA  
 insulin, Zymo, recombinant -- Novo Nordisk  
 insulinotropin -- Scios  
 Insulysin gene therapy --  
 integrin antagonists -- Merck  
 Interferon (Alpha2) -- SRC VB VECTOR,  
   Viragen, Dong-A, Hoffman La-Roche,  
   Genentech  
 Interferon -- BioMedicines, Human Genome  
   Sciences  
 Interferon (Alfa-n3) -- Interferon Sciences  
   Intl.  
 Interferon (Alpha), Biphax -- Helix  
 Interferon (Alpha) -- Amgen, BioNative,  
   Novartis, Genzyme Transgenics,  
   Hayashibara, Inhale Therapeutics  
   Systems, Medusa, Flamel, Dong-A,  
   GeneTrol, Nastech, Shantha,  
   Wassermann, LG Chem, Sumitomo,  
   Aventis, Behring EGIS, Pepgen, Servier,  
   Rhein Biotech,  
 Interferon (Alpha2A)  
 Interferon (Alpha2B) -- Enzon, Schering-  
   Plough, Biogen, IDEA  
 Interferon (Alpha-N1) -- GlaxoSmithKline  
 Interferon (beta) -- Rentschler, GeneTrol,  
   Meristem, Rhein Biotech, Toray, Yeda,  
   Daiichi, Mochida  
 Interferon (Beta1A) -- Serono, Biogen  
 Interferon (beta1A), Inhale -- Biogen  
 Interferon (B1b) -- Chiron  
 Interferon (tau) -- Pepgen  
 Interferon alfacon-1 -- Amgen  
 Interferon alpha-2a vaccine  
 Interferon Beta 1b -- Schering/Chiron,  
   InterMune  
 Interferon Gamma -- Boehringer Ingelheim,  
   Sheffield, Rentschler, Hayashibara  
 Interferon receptor, Type I -- Serono  
 Interferon (Gamma1B) -- Genentech  
 Interferon-alpha-2b + ribavirin -- Biogen,  
   ICN  
 Interferon-alpha-2b gene therapy --  
   Schering-Plough  
 Interferon-con1 gene therapy --

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interleukin-1 antagonists -- Dompe  
 Interleukin-1 receptor antagonist -- Abbott  
     Bloersearch, Pharmacia  
 Interleukin-1 receptor type I -- Immunex  
 interleukin-1 receptor Type II -- Immunex  
 Interleukin-10 -- DNAX, Schering-Plough  
 Interleukin-10 gene therapy --  
 interleukin-12 -- Genetics Institute, Hoffman  
     La-Roche  
 interleukin-13 -- Sanofi  
 Interleukin-13 antagonists -- AMRAD  
 Interleukin-13-PE38QQR  
 interleukin-15 -- Immunex  
 interleukin-16 -- Research Corp  
 interleukin-18 -- GlaxoSmithKline  
 Interleukin-1-alpha -- Immunex/Roche  
 interleukin-2 -- SRC VB VECTOR,  
     Ajinomoto, Biomira  
 Interleukin-3 -- Cangene  
 Interleukin-4 -- Immunology Ventures,  
     Sanofi Winthrop, Schering-Plough,  
     Immunex/ Sanofi Winthrop, Bayer, Ono  
 Interleukin-4 + TNF-Alpha -- NIH  
 interleukin-4 agonist -- Bayer  
 interleukin-4 fusion toxin -- Ligand  
 Interleukin-4 receptor -- Immunex, Immun  
 Interleukin-6 -- Ajinomoto, Cangene, Yeda,  
     Genetics Institute, Novartis  
 interleukin-6 fusion protein --  
 interleukin-6 fusion toxin -- Ligand, Sero  
 Interleukin-7 -- IC Innovations  
 interleukin-7 receptor -- Immunex  
 interleukin-8 antagonists -- Kyowa  
     Hakko/Millennium/Pfizer  
 interleukin-9 antagonists -- Genaera  
 interleukins -- Cel-Sci  
 Iodine I 131 tositumomab -- Corixa  
 Ior EPOCIM -- Center of Molecular  
     Immunology  
 Ior-P3 -- Center of Molecular Immunology  
 IP-10 -- NIH  
 IPF -- Metabolex  
 IR-501 -- Immune Response  
 ISIS 9125 -- Isis Pharmaceuticals  
 ISURF No. 1554 -- Millennium  
 ISURF No. 1866 -- Iowa State Univer.  
 ITF-1697 -- Italfarmaco  
 IxC 162 -- Ixion  
 J 695 -- Cambridge Antibody Tech.,  
     Genetics Inst., Knoll  
 Jagged + FGF -- Repair  
 JKC-362 -- Phoenix Pharmaceuticals  
 JTP-2942 -- Japan Tobacce  
 Juman monoclonal antibodies --  
     Medarex/Raven  
 K02 -- Axs Pharmaceuticals  
 Keliximab -- IDEC  
 Keyhole limpet haemocyanin  
 KGF -- Amgen  
 KM 871 -- Kyowa  
 KPI 135 -- Scios  
 KPI-022 -- Scios  
 Kringle 5  
 KSB 304  
 KSB-201 -- KS Biomedix  
 L 696418 -- Merck  
 L 703801 -- Merck  
 L1 -- Acorda  
 L-761191 -- Merck  
 lactoferrin -- Meristem, Pharming, Agennix  
 lactoferrin cardio -- Pharming  
 LAG-3 -- Sero  
 LAIT -- GEMMA  
 LAK cell cytotoxin -- Arizona  
 lamellarins -- PharmaMar/University of  
     Malaga  
 laminin A peptides -- NIH  
 lanoteplase -- Genetics Institute  
 Iaronidase -- BioMarin  
 Lassa fever vaccine  
 LCAT -- NIH  
 LDP 01 -- Millennium



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LDP 02 -- Millennium  
 Lecithinized superoxide dismutase --  
 Seikagaku  
 LeIF adjuvant -- Corixa  
 leishmaniasis vaccine -- Corixa  
 lenercept -- Hoffman La-Roche  
 Lenograstim -- Aventis, Chugai  
 lepirudin -- Aventis  
 leptin -- Amgen, IC Innovations  
 Leptin gene therapy -- Chiron Corporation  
 leptin, 2nd-generation -- Amgen  
 leridistim -- Pharmacia  
 leuprolide, ProMaxx -- Epic  
 leuprorelin, oral -- Unigene  
 LeuTech -- Papatin  
 LEX 032 -- SuperGen  
 LiDEPT -- Novartis  
 lipase -- Altus Biologics  
 lipid A vaccine -- EntreMed  
 lipid-linked anchor Tech. -- ICRT, ID  
 Biomedical  
 liposome-CD4 Tech. -- Sheffield  
 Listeria monocytogenes vaccine  
 LMB 1  
 LMB 7  
 LMB 9 -- Battelle Memorial Institute, NIH  
 LM-CD45 -- Cantab Pharmaceuticals  
 lovastatin -- Merck  
 LSA-3  
 LT- $\beta$  receptor -- Biogen  
 lung cancer vaccine -- Corixa  
 lusupultide -- Scios  
 L-Vax -- AVAX  
 LY 355455 -- Eli Lilly  
 LY 366405 -- Eli Lilly  
 LY-355101 -- Eli Lilly  
 Lyme disease DNA vaccine -- Vical/Aventis  
 Pasteur  
 Lyme disease vaccine -- Aquila  
 Biopharmaceuticals, Aventis, Pasteur,  
 Symbicom, GlaxoSmithKline, Hyland  
 Immuno, MedImmune  
 Lymphocytic choriomeningitis virus vaccine  
 lymphoma vaccine -- Biomira, Genitope  
 LYP18  
 lys plasminogen, recombinant  
 Lysosomal storage disease gene therapy --  
 Avigen  
 lysostaphin -- Nutrition 21  
 M 23 -- Gruenenthal  
 M1 monoclonal antibodies -- Acorda  
 Therapeutics  
 MA 16N7C2 -- Corvas Intl.  
 malaria vaccine -- GlaxoSmithKline,  
 AdProTech, Antigenics, Apovia, Aventis  
 Pasteur, Axis Genetics, Behringwerke,  
 CDCP, Chiron Vaccines, Genzyme  
 Transgenics, Hawaii, MedImmune, NIH,  
 NYU, Oxon, Roche/Saramane, Biotech  
 Australia, Rx Tech  
 Malaria vaccine CDC/NIIMALVAC-1  
 malaria vaccine, multicomponent  
 mammaglobin -- Corixa  
 mammastatin -- Biotherapeutics  
 mannan-binding lectin -- Natlmmu  
 mannan-MUC1 -- Psiron  
 MAP 30  
 Marinovir -- Phytera  
 MARstem -- Maret  
 MB-015 -- Mochida  
 MBP -- ImmuLogic  
 MCI-028 -- Mitsubishi-Tokyo  
 MCF -- Human Genome Sciences  
 MDC -- Advanced BioScience -- Akzo  
 Nobel, ICOS  
 MDX 11 -- Medarex  
 MDX 210 -- Medarex  
 MDX 22 -- Medarex  
 MDX 22

FIG. 1Q

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MDX 240 -- Medarex	Methionine lyase gene therapy --
MDX 33	AntiCancer
MDX 44 -- Medarex	Met-RANTES -- Genexa Biomedical,
MDX 447 -- Medarex	Serono
MDX H210 -- Medarex	Metreleptin
MDX RA -- Houston BioTech., Medarex	MGDF -- Kirin
ME-104 -- Pharmexa	MGV -- Progenics
Measles vaccine	micrin -- Endocrine
Mecasmerin -- Cephalon/Chiron, Chiron	microplasmin -- ThromboGenics
MEDI 488 -- MedImmune	MIF -- Genetics Institute
MEDI 500	migration inhibitory factor -- NIH
MEDI 507 -- BioTransplant	Mim CD4.1 -- Xyte Therapies
melanin concentrating hormone --	mirostipen -- Human Genome Sciences
Neurocrine Biosciences	MK 852 -- Merck
melanocortins -- OMRF	Mobenakin -- NIS
Melanoma monoclonal antibodies -- Viragen	molgramostim -- Genetics Institute, Novartis
melanoma vaccine -- GlaxoSmithKline,	monoclonal antibodies -- Abgenix/Celltech,
Akzo Nobel, Avant, Aventis Pasteur,	Immusol/ Medarex, Viragen/ Roslin
Bavarian Nordic, Biovector, CancerVax,	Institute, Cambridge Antibody Tech./Elan
Genzyme Molecular Oncology, Humbolt,	MAb 108 --
ImClone Systems, Memorial, NYU, Oxxon	MAb 10D5 --
Melanoma vaccine Magevac -- Therion	MAb 14.18-interleukin-2 immunocytokine --
memory enhancers -- Scios	Lexigen
meningococcal B vaccine -- Chiron	MAb 14G2a --
meningococcal vaccine -- CAMR	MAb 15A10 --
Meningococcal vaccine group B conjugate -	MAb 170 -- Biomira
- North American Vaccine	MAb 177Lu CC49 --
Meningococcal vaccine group B	MAb 17F9
recombinant -- BioChem Vaccines,	MAb 1D7
Microscience	MAb 1F7 -- Immune Network
Meningococcal vaccine group Y conjugate -	MAb 1H10-doxorubicin conjugate
- North American Vaccine	MAb 26-2F
Meningococcal vaccine groups A B and C	MAb 2A11
conjugate -- North American Vaccine	MAb 2E1 -- RW Johnson
Mepolizumab -- GlaxoSmithKline	MAb 2F5
Metastatin -- EntreMed, Takeda	MAb 31.1 -- International BiImmune
Met-CkB7 -- Human Genome Sciences	Systems
met-enkephalin -- TNI	MAb 32 -- Cambridge Antibody Tech.,
METH-1 -- Human Genome Sciences	Peptech
methioninase -- AntiCancer	MAb 323A3 -- Centocor
	MAb 3C5

FIG. 1R

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MAb 3F12	MAb C242-PE conjugate
MAb 3F8	MAB c30-6
MAb 42/6	MAB CA208-cytorhodin-S conjugate --
MAb 425 -- Merck KGaA	Hoechst Japan
MAb 447-52D -- Merck Sharp & Dohme	MAB CC49 -- Enzon
MAb 45-2D9- -- haematoporphyrin	MAB ch14.18 --
conjugate	MAB CH14.18-GM-CSF fusion protein --
MAB 4B4	Lexigen
MAB 4E3-CPA conjugate -- BCM Oncologia	MAB chCE7
MAB 4E3-daunorubicin conjugate	MAB CI-137 -- AMRAD
MAB 50-6	MAB cisplatin conjugate
MAB 50-61A -- Institut Pasteur	MAB CLB-CD19
MAB 5A8 -- Biogen	MAB CLB-CD19v
MAB 791T/36-methotrexate conjugate	MAB CLL-1 -- Peregrine
MAB 7c11.e8	MAB CLL-1-GM-CSF conjugate
MAB 7E11 C5-selenocystamine conjugate	MAB CLL-1-IL-2 conjugate -- Peregrine
MAB 93KA9 -- Novartis	MAB CLN IgG -- doxorubicin conjugates
MAB A5B7-cisplatin conjugate --	MAB conjugates -- Tanox
Biodynamics Research, Pharmacia	MAB D612
MAB A5B7-I-131	MAB Dal B02
MAB A7	MAB DC101 -- ImClone
MAB A717 -- Exocell	MAB EA 1 --
MAB A7-zinostatin conjugate	MAB EC708 -- Biovation
MAB ABX-RB2 -- Abgenix	MAB EP-5C7 -- Protein Design Labs
MAB ACA 11	MAB ERIC-1 -- ICRT
MAB AFP-I-131 -- Immunomedics	MAB F105 gene therapy
MAB AP1	MAB FC 2.15
MAB AZ1	MAB G250 -- Centocor
MAB B3-LysPE40 conjugate	MAB GA6
MAB B4 -- United Biomedical	MAB GA733
MAB B43 Genistein-conjugate	MAB Gliomab-H -- Viventia Biotech
MAB B43.13-Tc-99m -- Biomira	MAB HB2-saporin conjugate
MAB B43-PAP conjugate	MAB HD 37 --
MAB B4G7-gelonin conjugate	MAB HD37-ricin chain-A conjugate
MAB BCM 43-daunorubicin conjugate --	MAB HNK20 -- Acambis
BCM Oncologia	MAB huN901-DM1 conjugate --
MAB BIS-1	ImmunoGen
MAB BMS 181170 -- Bristol-Myers Squibb	MAB I-131 CC49 -- Corixa
MAB BR55-2	MAB ICO25
MAB BW494	MAB ICR12-CPG2 conjugate
MAB C 242-DM1 conjugate -- ImmunoGen	MAB ICR-62

FIG. 1S

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MAb IRac-ricin A conjugate	MAb R-24
MAb K1	MAb R-24 $\alpha$ Human GD3 -- Celltech
MAb KS1-4-methotrexate conjugate	MAb RFB4-ricin chain A conjugate
MAb L6 -- Bristol-Myers Squibb, Oncogen	MAb RFT5-ricin chain A conjugate
MAb LICO 16-88	MAb SC 1
MAb LL2-I-131 -- Immunomedics	MAb SM-3 -- ICRT
MAb LL2-Y90	MAb SMART 1D10 -- Protein Design Labs
MAb LS2D617 -- Hybritech	MAb SMART ABL 364 -- Novartis
MAb LYM-1-gelonin conjugate	MAb SN6f
MAb LYM-1-I-131	MAb SN6f-deglycosylated ricin A chain conjugate --
MAb LYM-1-Y-90	MAb SN6j
MAb LYM-2 -- Peregrine	MAb SN7-ricin chain A conjugate
MAb M195	MAb T101-Y-90 conjugate -- Hybritech
MAb M195-bismuth 213 conjugate -- Protein Design Labs	MAb T-88 -- Chiron
MAb M195-gelonin conjugate	MAb TB94 -- Cancer ImmunoBiology
MAb M195-I-131	MAb TEC 11
MAb M195-Y-90	MAb TES-23 -- Chugai
MAb MA 33H1 -- Sanofi	MAb TM31 -- Avant
MAb MAD11	MAb TNT-1 -- Cambridge Antibody Tech., Peregrine
MAb Mgb2	MAb TNT-3
MAb MINT5	MAb TNT-3 -- IL2 fusion protein --
MAb MK2-23	MAb TP3-At-211
MAb MOC31 ETA(252-613) conjugate	MAb TP3-PAP conjugate --
MAb MOC-31-In-111	MAb UJ13A -- ICRT
MAb MOC-31-PE conjugate	MAb UN3
MAb MR6 --	MAb ZME-018-gelonin conjugate
MAb MRK-16 -- Aventis Pasteur	MAB-BC2 -- GlaxoSmithKline
MAb MS11G6	MAB-DM1 conjugate -- ImmunoGen
MAB MX-DTPA BrE-3	MAB-ricin-chain-A conjugate -- XOMA
MAB MY9	MAB-temoporphin conjugates
MAB Nd2 -- Tosoh	Monopharm C -- Viventia Biotech
MAB NG-1 -- Hygeia	monteplase -- Eisai
MAB NM01 -- Nissin Food	montirelin hydrate -- Gruenenthal
MAB OC 125	morotocog alfa -- Genetics Institute
MAB OC 125-CMA conjugate	Morotocog-alfa -- Pharmacia
MAB OKI-1 -- Ortho-McNeil	MP 4
MAB OX52 -- Bioproducts for Science	MP-121 -- Biopharm
MAB PMA5	MP-52 -- Biopharm
MAB PR1	MRA -- Chugai
MAB prost 30	

FIG. 1T

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MS 28168 -- Mitsui Chemicals, Nihon Schering  
 MSH fusion toxin -- Ligand  
 MSI-99 -- Genaera  
 MT 201 -- Micromet  
 Muc-1 vaccine -- Corixa  
 mucosal tolerance -- Aberdeen  
 mullerian inhibiting subst  
 muplestim -- Genetics Institute, Novartis, DSM Anti-Infectives  
 murine MAB -- KS Biomedix  
 Mutant somatropin -- JCR Pharmaceutical  
 MV 833 -- Toagosei  
 Mycoplasma pulmonis vaccine  
 Mycoprex -- XOMA  
 myeloperoxidase -- Henogen  
 myostatin -- Genetics Institute  
 Naccolomab tafenatox -- Pharmacia  
 nagrestipen -- British Biotech  
 NAP-5 -- Corvas Intl.  
 NAPc2 -- Corvas Intl.  
 nartograstim -- Kyowa  
 Natalizumab -- Protein Design Labs  
 Nateplase -- NIH, Nihon Schering  
 nateplase -- Schering AG  
 NBI-3001 -- Neurocrine Biosci.  
 NBI-5788 -- Neurocrine Biosci.  
 NBI-6024 -- Neurocrine Biosci.  
 Nef inhibitors -- BRI  
 Neisseria gonorrhoea vaccine -- Antex Biologics  
 Neomycin B-arginine conjugate  
 Nerelimomab -- Chiron  
 Nerve growth factor -- Amgen -- Chiron, Genentech  
 Nerve growth factor gene therapy  
 nesiritide citrate -- Scios  
 neuregulin-2 -- CeNeS  
 neurocan -- NYU  
 neuronal delivery system -- CAMR  
 Neuroprotective vaccine -- University of Auckland  
 neurotrophic chimaeras -- Regeneron  
 neurotrophic factor -- NsGene, CereMedix  
 NeuroVax -- Immune Response  
 neuriturin -- Genentech  
 neutral endopeptidase -- Genentech  
 NGF enhancers -- NeuroSearch  
 NHL vaccine -- Large Scale Biology  
 NIP45 -- Boston Life Sciences  
 NKI-B20  
 NM 01 -- Nissin Food  
 NMI-139 -- NitroMed  
 NMMP -- Genetics Institute  
 NN-2211 -- Novo Nordisk  
 Noggin -- Regeneron  
 Nonacog alfa  
 Norelin -- Biostar  
 Norwalk virus vaccine  
 NRLU 10 -- NeoRx  
 NRLU 10 PE -- NeoRx  
 NT-3 -- Regeneron  
 NT-4/5 -- Genentech  
 NU 3056  
 NU 3076  
 NX 1838 -- Gilead Sciences  
 NY ESO-1/CAG-3 antigen -- NIH  
 NYVAC-7 -- Aventis Pasteur  
 NZ-1002 -- Novazyme  
 obesity therapy -- Nobex  
 OC 10426 -- Ontogen  
 OC 144093 -- Ontogen  
 OCIF -- Sankyo  
 Oct-43 -- Otsuka  
 OK PSA - liposomal  
 OKT3-gamma-1-ala-ala  
 OM 991  
 OM 992  
 Omalizumab -- Genentech  
 oncoimmunin-L -- NIH  
 Oncolysin B -- ImmunoGen

FIG. 1U

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Oncolysin CD6 -- ImmunoGen  
 Oncolysin M -- ImmunoGen  
 Oncolysin S -- ImmunoGen  
 Oncophage -- Antigenics  
 Oncostatin M -- Bristol-Myers Squibb  
 OncoVax-CL -- Jenner Biotherapies  
 OncoVax-P -- Jenner Biotherapies  
 oncept -- Yeda  
 onychomycosis vaccine -- Boehringer  
 Ingelheim  
 opebecan -- XOMA  
 opioids -- Arizona  
 Oprelvekin -- Genetics Institute  
 Org-33408 b-- Akzo Nobel  
 Orolip DP -- EpiCept  
 oryzacystatin  
 OSA peptides -- GenSci Regeneration  
 osteoblast-cadherin GF -- Pharis  
 Osteocalcin-thymidine kinase gene therapy  
 osteogenic protein -- Curis  
 osteopontin -- OraPharma  
 osteoporosis peptides -- Integra, Telios  
 osteoprotegerin -- Amgen, SnowBrand  
 otitis media vaccines -- Antex Biologics  
 ovarian cancer -- University of Alabama  
 OX40-IgG fusion protein -- Cantab, Xenova  
 P 246 -- Diatide  
 P 30 -- Alfacell  
 p1025 -- Active Biotech  
 P-113<sup>A</sup> -- Demegen  
 P-16 peptide -- Transition Therapeutics  
 p43 -- Ramot  
 P-50 peptide -- Transition Therapeutics  
 p53 + RAS vaccine -- NIH, NCI  
 PACAP(1-27) analogue  
 paediatric vaccines -- Chiron  
 Pafase -- ICOS  
 PAGE-4 plasmid DNA -- IDEC  
 PAI-2 -- Biotech Australia, Human  
 Therapeutics  
 Palivizumab -- MedImmune  
 PAM 4 -- Merck  
 pamiteplase -- Yamanouchi  
 pancreatin, Minitabs -- Eurand  
 Pangen -- Fournier  
 Pantarin -- Selective Genetics  
 Parainfluenza virus vaccine -- Pharmacia,  
 Pierre Fabre  
 paraoxanase -- Esperion  
 parathyroid hormone -- Abiogen, Korea  
 Green Cross  
 Parathyroid hormone (1-34) --  
 Chugai/Suntory  
 Parkinson's disease gene therapy -- Cell  
 Genesys/ Ceregene  
 Parvovirus vaccine -- MedImmune  
 PCP-Scan -- Immunomedics  
 PDGF cocktail -- Theratechnologies  
 peanut allergy therapy -- Dynavax  
 PEG anti-ICAM MAb -- Boehringer  
 Ingelheim  
 PEG asparaginase -- Enzon  
 PEG glucocerebrosidase  
 PEG hirudin -- Knoll  
 PEG interferon-alpha-2a -- Roche  
 PEG interferon-alpha-2b + ribavirin --  
 Biogen, Enzon, ICN Pharmaceuticals,  
 Schering-Plough  
 PEG MAb A5B7 --  
 Pegacaristim -- Amgen -- Kirin Brewery --  
 ZymoGenetics  
 Pegaldesleukin -- Research Corp  
 pegaspargase -- Enzon  
 pegfilgrastim -- Amgen  
 PEG-interferon Alpha -- Viragen  
 PEG-interferon Alpha 2A -- Hoffman La-  
 Roche  
 PEG-interferon Alpha 2B -- Schering-  
 Plough  
 PEG-r-hirudin -- Abbott  
 PEG-uricase -- Mountain View  
 Pegvisomant -- Genentech

FIG. 1V

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PEGylated proteins, PolyMASC -- Valentis Pharmaprojects No. 5947 -- StressGen  
 PEGylated recombinant native human leptin Pharmaprojects No. 5961 --  
 -- Roche Theratechnologies  
 Pentumomab Pharmaprojects No. 5962 -- NIH  
 Penetratin -- Cyclacel Pharmaprojects No. 5966 -- NIH  
 Pepsican -- Antisoma Pharmaprojects No. 5994 -- Pharming  
 peptide G -- Peptech, ICRT Pharmaprojects No. 5995 -- Pharming  
 peptide vaccine -- NIH, NCRI Pharmaprojects No. 6023 -- IMMUCON  
 Pexelizumab Pharmaprojects No. 6063 -- Cytoclonal  
 pexiganan acetate -- Genatera Pharmaprojects No. 6073 -- SIDDCO  
 Pharmaprojects No. 3179 -- NYU Pharmaprojects No. 6115 -- Genzyme  
 Pharmaprojects No. 3390 -- Ernest Orlando Pharmaprojects No. 6227 -- NIH  
 Pharmaprojects No. 3417 -- Sumitomo Pharmaprojects No. 6230 -- NIH  
 Pharmaprojects No. 3777 -- Acambis Pharmaprojects No. 6236 -- NIH  
 Pharmaprojects No. 4209 -- XOMA Pharmaprojects No. 6243 -- NIH  
 Pharmaprojects No. 4349 -- Baxter Intl. Pharmaprojects No. 6244 -- NIH  
 Pharmaprojects No. 4651 Pharmaprojects No. 6281 -- Senetek  
 Pharmaprojects No. 4915 -- Avanir Pharmaprojects No. 6365 -- NIH  
 Pharmaprojects No. 5156 -- Rhizogenics Pharmaprojects No. 6368 -- NIH  
 Pharmaprojects No. 5200 -- Pfizer Pharmaprojects No. 6373 -- NIH  
 Pharmaprojects No. 5215 -- Origene Pharmaprojects No. 6408 -- Pan Pacific  
 Pharmaprojects No. 5216 -- Origene Pharmaprojects No. 6410 -- Athensys  
 Pharmaprojects No. 5218 -- Origene Pharmaprojects No. 6421 -- Oxford  
 Pharmaprojects No. 5267 -- ML GlycoSciences  
 Laboratories Pharmaprojects No. 6522 -- Maxygen  
 Pharmaprojects No. 5373 -- MorphoSys Pharmaprojects No. 6523 -- Pharis  
 Pharmaprojects No. 5493 -- Metabolex Pharmaprojects No. 6538 -- Maxygen  
 Pharmaprojects No. 5707 -- Genentech Pharmaprojects No. 6554 -- APALEXO  
 Pharmaprojects No. 5728 -- Autogen Pharmaprojects No. 6560 -- Ardana  
 Pharmaprojects No. 5733 -- BioMarin Pharmaprojects No. 6562 -- Bayer  
 Pharmaprojects No. 5757 -- NIH Pharmaprojects No. 6569 -- Eos  
 Pharmaprojects No. 5765 -- Gryphon Phenoxazine  
 Pharmaprojects No. 5830 -- AntiCancer Phenylase -- Ibex  
 Pharmaprojects No. 5839 -- Dyax Pigment epithelium derived factor --  
 Pharmaprojects No. 5849 -- Johnson & plasminogen activator inhibitor-1,  
 Johnson recombinant -- DuPont Pharmaceuticals  
 Pharmaprojects No. 5860 -- Mitsubishi-  
 Tokyo  
 Pharmaprojects No. 5869 -- Oxford  
 GlycoSciences  
 Pharmaprojects No. 5883 -- Asahi Brewery

FIG. 1W

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Plasminogen activators -- Abbott  
 Laboratories, American Home Products,  
 Boehringer Mannheim, Chiron  
 Corporation, DuPont Pharmaceuticals, Eli  
 Lilly, Shionogi, Genentech, Genetics  
 Institute, GlaxoSmithKline, Hemispherx  
 Biopharma, Merck & Co, Novartis,  
 Pharmacia Corporation, Wakamoto, Yeda  
 plasminogen-related peptides -- Bio-Tech.  
 General/MGH  
 platelet factor 4 -- RepliGen  
 Platelet-derived growth factor -- Amgen --  
 ZymoGenetics  
 plusonernerin-- Hayashibara  
 PMD-2850 -- Protherics  
 Pneumococcal vaccine -- Antex Biologics,  
 Aventis Pasteur  
 Pneumococcal vaccine intranasal --  
 BioChem Vaccines/Biovector  
 PR1A3  
 PR-39  
 pralmorelin -- Kaken  
 Pretarget-Lymphoma -- NeoRx  
 Priliximab -- Centocor  
 PRO 140 -- Progenics  
 PRO 2000 -- Procept  
 PRO 367 -- Progenics  
 PRO 542 -- Progenics  
 pro-Apo A-I -- Esperion  
 prolactin -- Genzyme  
 Prosaptide TX14(A) -- Bio-Tech. General  
 prostate cancer antibodies -- Immunex,  
 UroCor  
 prostate cancer antibody therapy --  
 Genentech/UroGenesys,  
 Genotherapeutics  
 prostate cancer immunotherapeutics -- The  
 PSMA Development Company  
 prostate cancer vaccine -- Aventis Pasteur,  
 Zonagen, Corixa, Dendreon, Jenner  
 Biotherapies, Therion Biologics  
 prostate-specific antigen -- EntrelMed  
 protein A -- RepliGen  
 protein adhesives -- Enzon  
 protein C -- Baxter Intl., PPL Therapeutics,  
 ZymoGenetics  
 protein C activator -- Gilead Sciences  
 protein kinase R antags -- NIH  
 protirelin -- Takeda  
 protocadherin 2 -- Caprion  
 Pro-urokinase -- Abbott, Bristol-Myers  
 Squibb, Dainippon, Tosoh -- Welfide  
 P-selectin glycoprotein ligand-1 -- Genetics  
 Institute  
 pseudomonal infections -- InterMune  
 Pseudomonas vaccine -- Cytovax  
 PSGL-Ig -- American Home Products  
 PSP-94 -- Procyon  
 PTH 1-34 -- Nobex  
 QuilImmune-M -- Antigenics  
 R 101933  
 R 125224 -- Sankyo  
 RA therapy -- Cardion  
 Rabies vaccine recombinant -- Aventis  
 Pasteur, BioChem Vaccines, Kaketsuken  
 Pharmaceuticals  
 RadioTheraCIM -- YM BioSciences  
 Ramot project No. 1315 -- Ramot  
 Ramot project No. K-734A -- Ramot  
 Ramot project No. K-734B -- Ramot  
 RANK -- Immunex  
 ranpimase -- Alfacell  
 ranpimase-anti-CD22 Mab -- Alfacell  
 RANTES inhibitor -- Milan  
 RAPID drug delivery systems -- ARIAD  
 rasburicase -- Sanofi  
 rBPI-21, topical -- XOMA  
 RC 529 -- Corixa  
 rCFTR -- Genzyme Transgenics  
 RD 62198  
 rDnase -- Genentech  
 RDP-58 -- SangStat

FIG. 1X



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RecepTox-Fce -- Keryx	Ribozyme gene therapy -- Genset
RecepTox-GnRH -- Keryx, MTR Technologies	Rickettsial vaccine recombinant
RecepTox-MBP -- Keryx, MTR Technologies	RIGScan CR -- Neoprobe
recFSH -- Akzo Nobel, Organon	RIP-3 -- Rigel
REGA 3G12	RK-0202 -- RxKinetix
Regavirumab -- Teijin	RLT peptide -- Esperion
relaxin -- Connetics, Corp	rMNEI -- IVAX
Renal cancer vaccine -- Macropharm	rmCRP -- Immtech
repifermin -- Human Genome Sciences	RN-1001 -- Renovo
Respiratory syncytial virus PFP-2 vaccine -- Wyeth-Lederle	RN-3 -- Renovo
Respiratory syncytial virus vaccine -- GlaxoSmithKline, Pharmacia, Pierre Fabre	RNAse conjugate -- Immunomedics
Respiratory syncytial virus vaccine inactivated	RO 631908 -- Roche
Respiratory syncytial virus-parainfluenza virus vaccine -- Aventis Pasteur, Pharmacia	Rotavirus vaccine -- Merck
Reteplase -- Boehringer Mannheim, Hoffman La-Roche	RP 431 -- DuPont Pharmaceuticals
Retropep -- Retroscreen	RP-128 -- Resolution
RFB4 (dsFv) PE38	RPE65 gene therapy --
RFI 641 -- American Home Products	RPR 110173 -- Aventis Pasteur
RFTS -- UAB Research Foundation	RPR 115135 -- Aventis Pasteur
RG 12986 -- Aventis Pasteur	RPR 116258A -- Aventis Pasteur
RG 83852 -- Aventis Pasteur	rPSGL-Ig -- American Home Products
RG-1059 -- RepliGen	r-SPC surfactant -- Byk Gulden
rGCR -- NIH	rV-HER-2/neu -- Theron Biologics
rGLP-1 -- Restoragen	SA 1042 -- Sankyo
rGRF -- Restoragen	sacrosidase -- Orphan Medical
rh Insulin -- Eli Lilly	Sant 7
RHAMM targeting peptides -- Cangene	Sargramostim -- Immunex
rHb1.1 -- Baxter Intl.	saruplase -- Gruenenthal
rhCC10 -- Claragen	Satumomab -- Cytogen
rhCG -- Sero	SB 1 -- COR Therapeutics
Rheumatoid arthritis gene therapy	SB 207448 -- GlaxoSmithKline
Rheumatoid arthritis vaccine -- Veterans Affairs Medical Center	SB 208651 -- GlaxoSmithKline
rhLH -- Sero	SB 240683 -- GlaxoSmithKline
	SB 249415 -- GlaxoSmithKline
	SB 249417 -- GlaxoSmithKline
	SB 6 -- COR Therapeutics
	SB RA 31012 --
	SC 56929 -- Pharmacia
	SCA binding proteins -- Curis, Enzon
	scFv(14E1)-ETA Berlex Laboratories,
	Schering AG
	ScFv(FRP5)-ETA --

FIG. 1Y

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ScFv6C6-PE40 --	somatomedin-1 -- GroPep, Mitsubishi-Tokyo, NIH
SCH 55700 -- Celltech	somatomedin-1 carrier protein -- Insmed
Schistosomiasis vaccine -- Glaxo Wellcome/Medeva, Brazil	somatostatin -- Ferring
SCPF -- Advanced Tissue Sciences	Somatotropin/
scuPA-suPAR complex -- Hadasit	Human Growth Hormone -- Bio-Tech. General, Eli Lilly
SD-9427 -- Pharmacia	somatropin -- Bio-Tech. General, Alkermes, ProLease, Aventis Behring, Biovector, Cangene, Dong-A, Eli Lilly, Emisphere, Enact, Genentech, Genzyme Transgenics, Grandis/InfiMed, CSL, InfiMed, MacroMed, Novartis, Novo Nordisk, Pharmacia Serono, TranXenoGen
SDF-1 -- Ono	somatropin derivative -- Schering AG
SDZ 215918 -- Novartis	somatropin, AIR -- Eli Lilly
SDZ 280125 -- Novartis	Somatropin, inhaled -- Eli Lilly/Alkermes
SDZ 89104 -- Novartis	somatropin, Kabi -- Pharmacia
SDZ ABL 364 -- Novartis	somatropin, Orasome -- Novo Nordisk
SDZ MMA 383 -- Novartis	Sonermin -- Dainippon Pharmaceutical
serine protease inhibs -- Pharis	SP(V5.2)C -- Supertek
sermorelin acetate -- Serono	SPf66
SERP-1 -- Viron	sphingomyelinase -- Genzyme
sertenef -- Dainippon	SR 29001 -- Sanofi
serum albumin, Recombinant human -- Aventis Behring	SR 41476 -- Sanofi
serum-derived factor -- Hadasit	SR-29001 -- Sanofi
Sevirumab -- Novartis	SS1(dsFV)-PE38 -- NeoPharm
SGN 14 -- Seattle Genetics	$\beta$ 2 microglobulin -- Avidex
SGN 15 -- Seattle Genetics	$\beta$ 2-microglobulin fusion proteins -- NIH
SGN 17/19 -- Seattle Genetics	$\beta$ -amyloid peptides -- CeNeS
SGN 30 -- Seattle Genetics	$\beta$ -defensin -- Pharis
SGN-10 -- Seattle Genetics	Staphylococcus aureus infections -- Inhibitex/ZLB
SGN-11 -- Seattle Genetics	Staphylococcus aureus vaccine conjugate -- Nabi
SH 306 -- DuPont Pharmaceuticals	Staphylococcus therapy -- Tripep
Shanvac-B -- Shantha	Staphylokinase -- Biovation, Prothera, Thrombogenetics
Shigella flexneri vaccine -- Avant, Acambis, Novavax	Streptococcal A vaccine -- M6 Pharmaceuticals, North American Vaccine
Shigella sonnei vaccine --	Streptococcal B vaccine -- Microscience
siCAM-1 -- Boehringer Ingelheim	
Silteplase -- Genzyme	
SIV vaccine -- Endocon, Institut Pasteur	
SK 896 -- Sanwa Kagaku Kenkyusho	
SK-827 -- Sanwa Kagaku Kenkyusho	
Skeletex -- CellFactors	
SKF 106160 -- GlaxoSmithKline	
S-nitroso-AR545C --	
SNTF -- Active Biotech	

FIG. 1Z

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Streptococcal B vaccine recombinant --  
 Biochem Vaccines  
 Streptococcus pyogenes vaccine  
 STRL-33 -- NIH  
 Subalin -- SRC VB VECTOR  
 SUI5 -- United Biomedical  
 SUI5-LHRH -- United Biomedical  
 SUN-E3001 -- Suntory  
 super high affinity monoclonal antibodies --  
 YM BioSciences  
 Superoxide dismutase -- Chiron, Enzon,  
 Ube Industries, Bio-Tech, Yeda  
 superoxide dismutase-2 -- OXIS  
 suppressin -- UAB Research Foundation  
 SY-161-P5 -- ThromboGenics  
 SY-162 -- ThromboGenics  
 Systemic lupus erythematosus vaccine --  
 MedClone/VivoRx  
 T cell receptor peptide vaccine  
 T4N5 liposomes -- AGI Dermatics  
 TACI, soluble -- ZymoGenetics  
 targeted apoptosis -- Antisoma  
 tasonermin -- Boehringer Ingelheim  
 TASP  
 TASP-V  
 Tat peptide analogues -- NIH  
 TBP I -- Yeda  
 TBP II  
 TBV25H -- NIH  
 Tc 99m lor cea1 -- Center of Molecular  
 Immunology  
 Tc 99m P 748 -- Diatide  
 Tc 99m votumumab -- Intracell  
 Tc-99m rh-Annexin V -- Theseus Imaging  
 teceleukin -- Biogen  
 tenecteplase -- Genentech  
 Teriparatide -- Armour Pharmaceuticals,  
 Asahi Kasei, Eli Lilly  
 terlipressin -- Ferring  
 testisin -- AMRAD  
 Tetrafilbricin -- Roche  
 TFPI -- EntreMed  
 tgD-IL-2 -- Takeda  
 TGF-Alpha -- ZymoGenetics  
 TGF- $\beta$  -- Kolon  
 TGF- $\beta$ 2 -- Insmad  
 TGF- $\beta$ 3 -- OSI  
 Thalassaemia gene therapy -- Crucell  
 TheraCIM-h-R3 -- Center of Molecular  
 Immunology, YM BioSciences  
 Theradigm-HBV -- Epimmune  
 Theradigm-HPV -- Epimmune  
 Theradigm-malaria -- Epimmune  
 Theradigm-melanoma -- Epimmune  
 TheraFab -- Antisoma  
 ThGRF 1-29 -- Theratechnologies  
 ThGRF 1-44 -- Theratechnologies  
 thrombomodulin -- Iowa, Novocastra  
 Thrombopoietin -- Dragon Pharmaceuticals,  
 Genentech  
 thrombopoietin, Pliva -- Recepton  
 Thrombospondin 2 --  
 thrombostatin -- Thromgen  
 thymalfasin -- SciClone  
 thymocartin -- Gedeon Richter  
 thymosin Alpha1 -- NIH  
 thyroid stimulating hormone -- Genzyme  
 tICAM-1 -- Bayer  
 Tick anticoagulant peptide -- Merck  
 TIF -- Xoma  
 Tifacogin -- Chiron, NIS, Pharmacia  
 Tissue factor -- Genentech  
 Tissue factor pathway inhibitor  
 TJN-135 -- Tsumura  
 TM 27 -- Avant  
 TM 29 -- Avant  
 TMC-151 -- Tanabe Seiyaku  
 TNF tumour necrosis factor -- Asahi Kasei  
 TNF Alpha -- Cytimmune  
 TNF antibody -- Johnson & Johnson  
 TNF binding protein -- Amgen  
 TNF degradation product -- Oncotech

FIG. 1AA

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TNF receptor -- Immunex	TXU-PAP
TNF receptor 1, soluble -- Amgen	TY-10721 -- TOA Eiyo
TNF Tumour necrosis factor-alpha -- Asahi Kasei, Genentech, Mochida	Type I diabetes vaccine -- Research Corp
TNF-Alpha inhibitor -- Tripep	Typhoid vaccine CVD 908
TNFR:Fc gene therapy -- Targeted Genetics	U 143677 -- Pharmacia
TNF-SAM2	U 81749 -- Pharmacia
Tolerimab -- Innogenetics	UA 1248 -- Arizona
Toxoplasma gondii vaccine -- GlaxoSmithKline	UGIF -- Sheffield
TP 9201 -- Telios	UIC 2
TP10 -- Avant	UK 101
TP20 -- Avant	UK-279276 -- Corvas Intl.
tPA -- Centocor	urodilatin -- Pharis
trafermin -- Scios	urofolitrophin -- Serono
TRAIL/Apo2L -- Immunex	uteroferrin -- Pepgen
transferrin-binding proteins -- CAMR	V 20 -- GLYCODEsign
Transforming growth factor-beta-1 -- Genentech	V2 vasopressin receptor gene therapy vaccines -- Active Biotech
transport protein -- Genesis	Varicella zoster glycoprotein vaccine -- Research Corporation Technologies
TRH -- Ferring	Varicella zoster virus vaccine live -- Cantab Pharmaceuticals
Triabin -- Schering AG	Vascular endothelial growth factor -- Genentech, University of California
Triconal	Vascular endothelial growth factors -- R&D Systems
Triflavin	vascular targeting agents -- Peregrine
troponin I -- Boston Life Sciences	vasopermeation enhancement agents -- Peregrine
TRP-2 <sup>A</sup> -- NIH	vasostatin -- NIH
trypsin inhibitor -- Mochida	VCL -- Bio-Tech. General
TSP-1 gene therapy --	VEGF -- Genentech, Scios
TT-232	VEGF inhibitor -- Chugai
TTS-CD2 -- Active Biotech	VEGF-2 -- Human Genome Sciences
Tuberculosis vaccine -- Aventis Pasteur, Genesis	VEGF-Trap -- Regeneron
Tumor Targeted Superantigens -- Active Biotech -- Pharmacia	viscumin, recombinant -- Madaus
tumour vaccines -- PhotoCure	Vitaxin
tumour-activated prodrug antibody conjugates -- Millennium/ImmunoGen	Vitrax -- ISTA Pharmaceuticals
tumstatin -- ILEX	West Nile virus vaccine -- Bavarian Nordic
Tuvirumab -- Novartis	WP 652
TV-4710 -- Teva	WT1 vaccine -- Corixa
TWEAK receptor -- Immunex	WX-293 -- Willex BioTech.

FIG. 1BB

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WX-360 -- Wilex BioTech.	YM 207 -- Yamanouchi
WX-UK1 -- Wilex BioTech.	YM 337 -- Protein Design Labs
XMP-500 -- XOMA	Yttrium-90 labelled biotin
XomaZyme-791 -- XOMA	Yttrium-90-labeled anti-CEA MAb T84.66 --
XTL 001 -- XTL Biopharmaceuticals	ZD 0490 -- AstraZeneca
XTL 002 -- XTL Biopharmaceuticals	ziconotide -- Elan
yeast delivery system -- GlobelImmune	ZK 157138 -- Berlex Laboratories
Yersinia pestis vaccine	Zollmombab aritox
YIGSR-Stealth -- Johnson & Johnson	Zorcell -- Immune Response
Yisum Project No. D-0460 -- Yisum	ZRXL peptides -- Novartis

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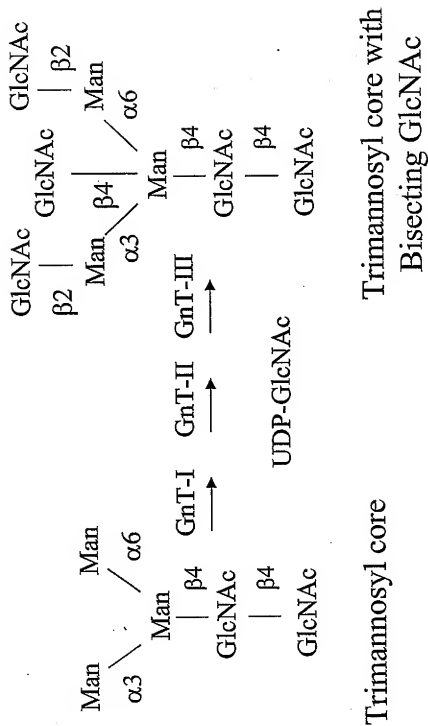
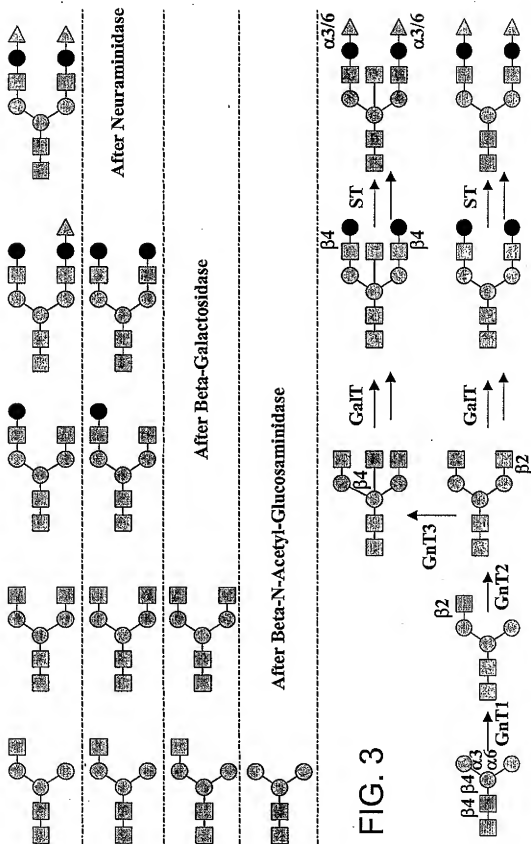


FIG. 2

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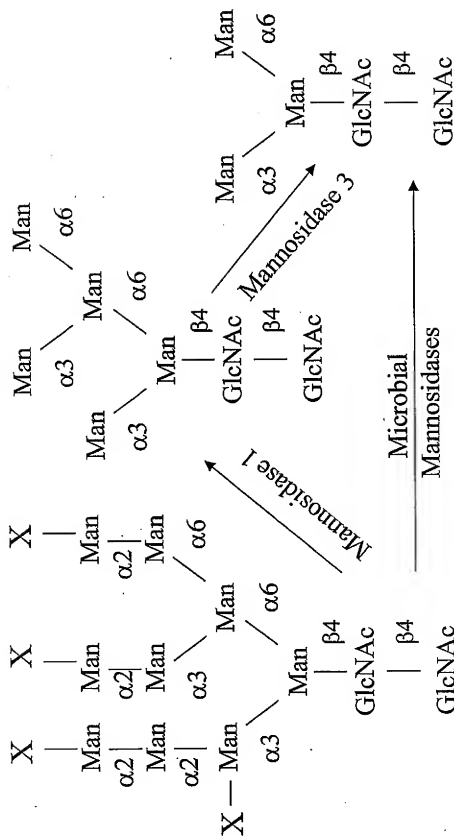


FIG. 5



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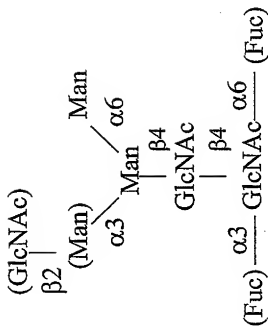


FIG. 7

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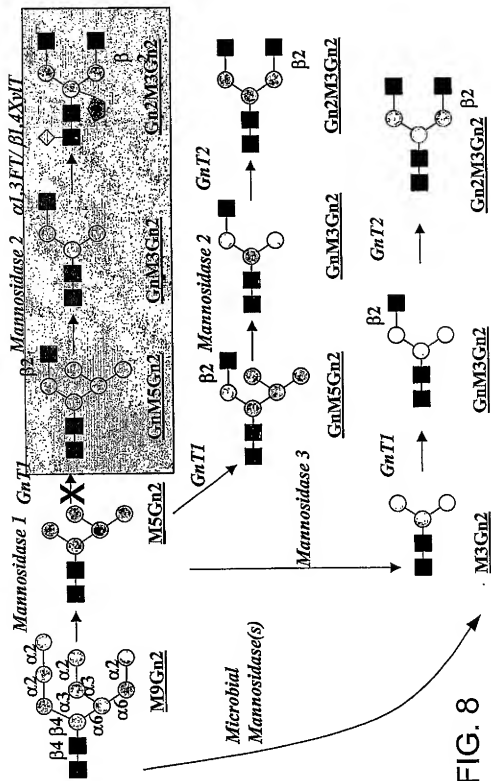


FIG. 8







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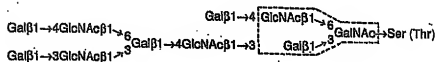
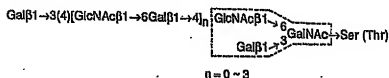
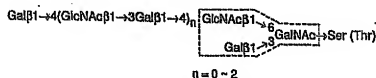
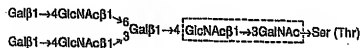
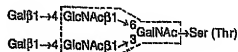
*Core 1**Core 2**Core 3**Core 4*

FIG. 12







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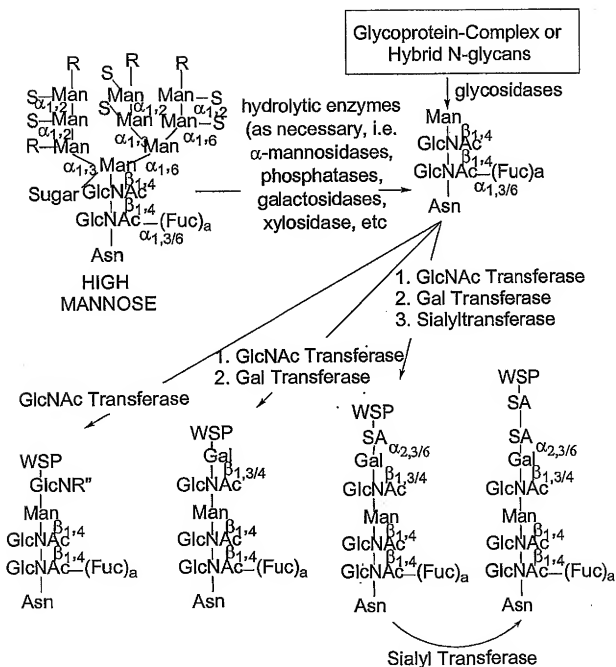
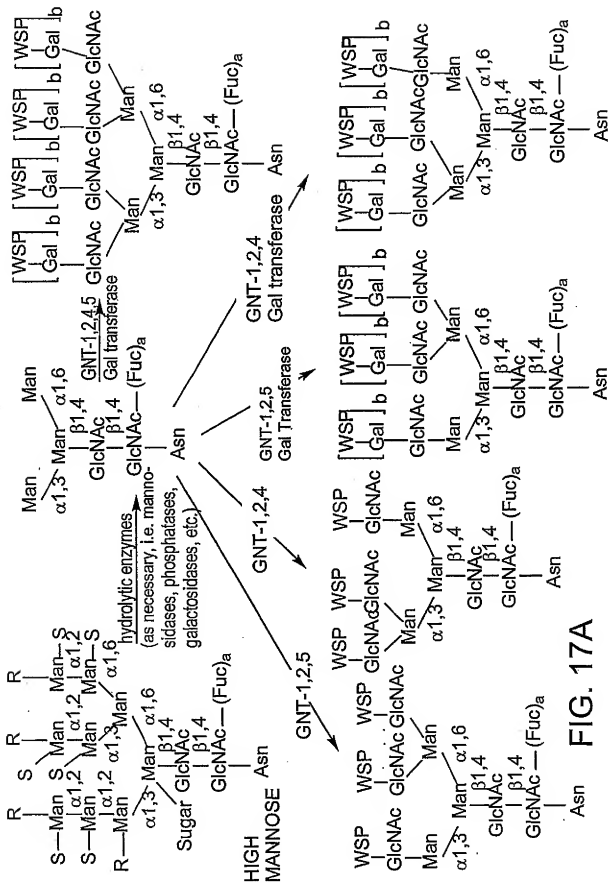


FIG. 14

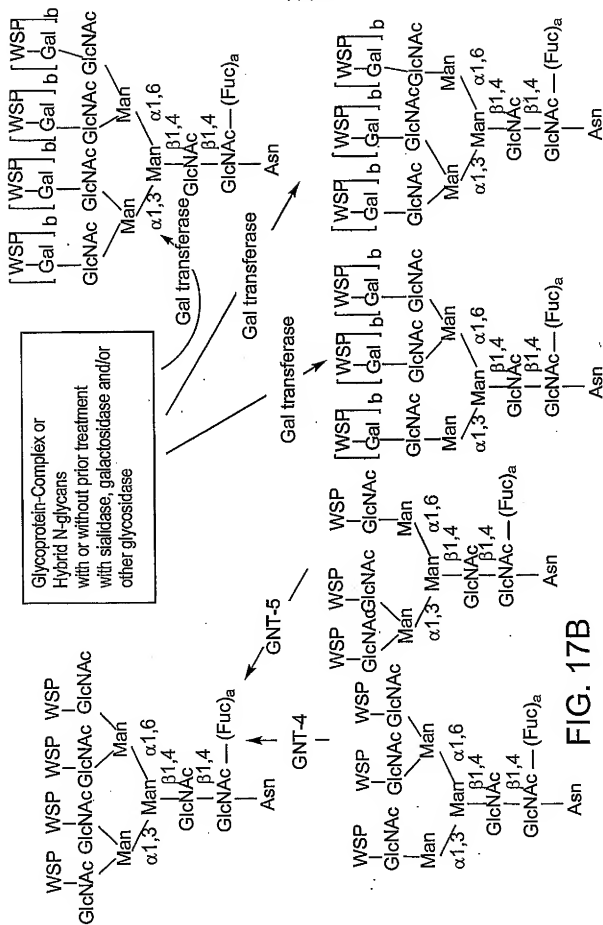




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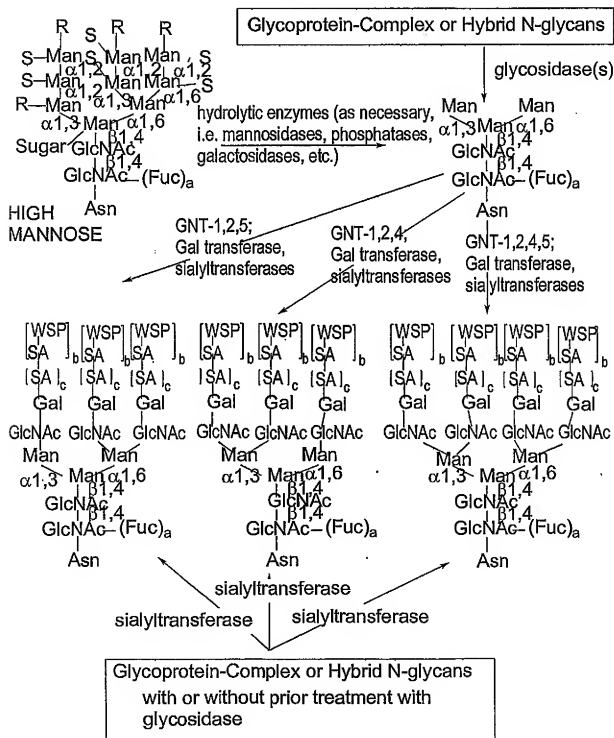
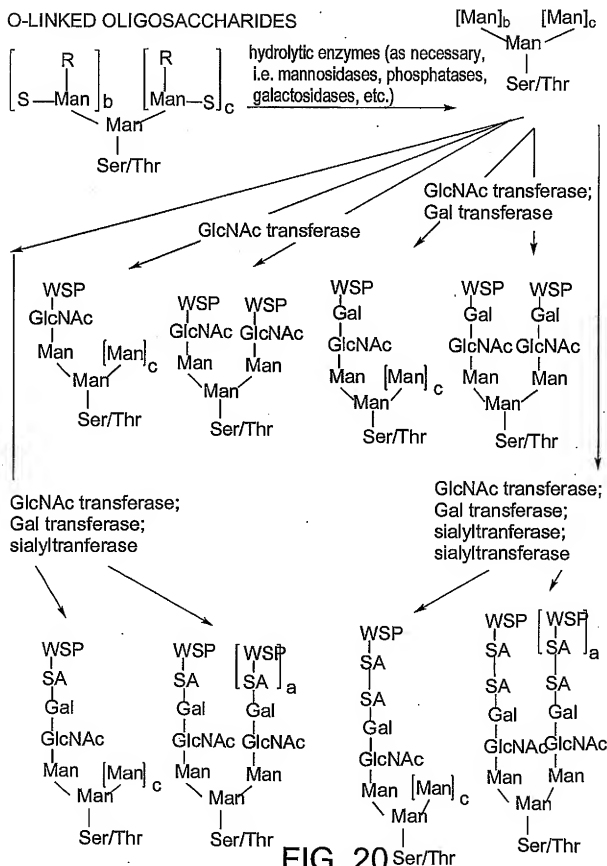


FIG. 19

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## O-LINKED OLIGOSACCHARIDES



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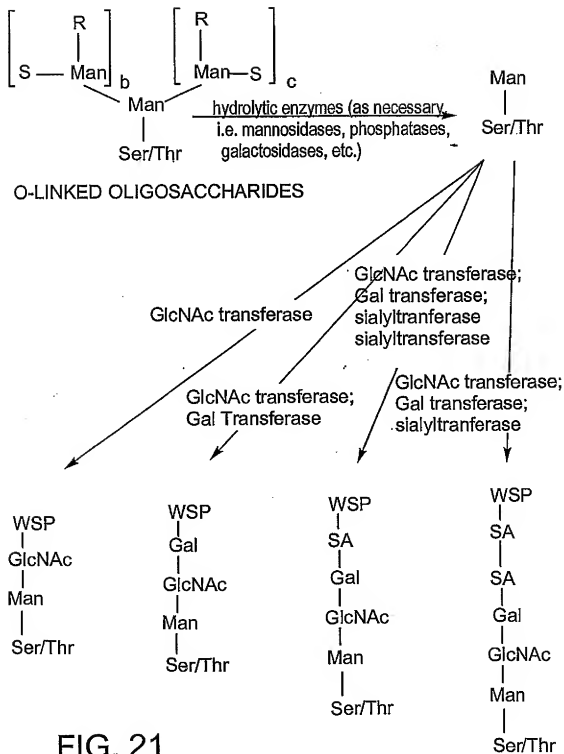


FIG. 21

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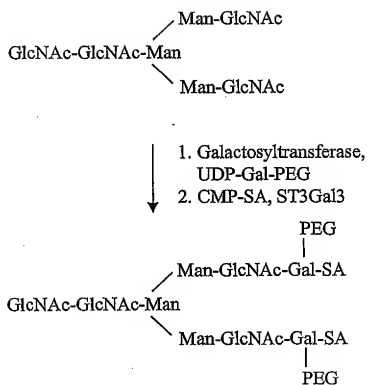


FIG. 22A

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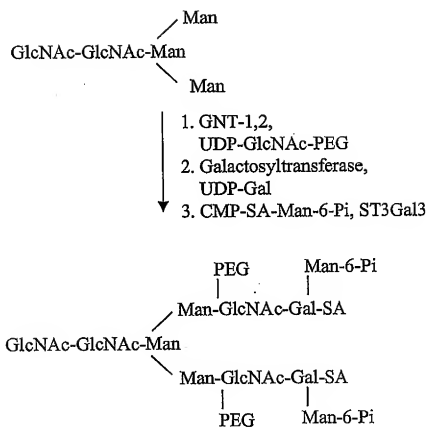


FIG. 22B

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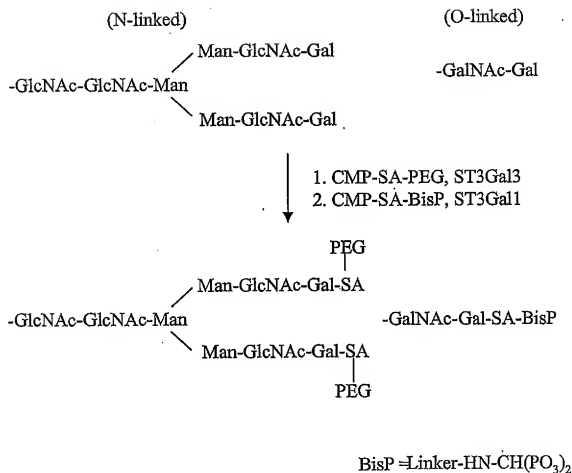


FIG. 22C

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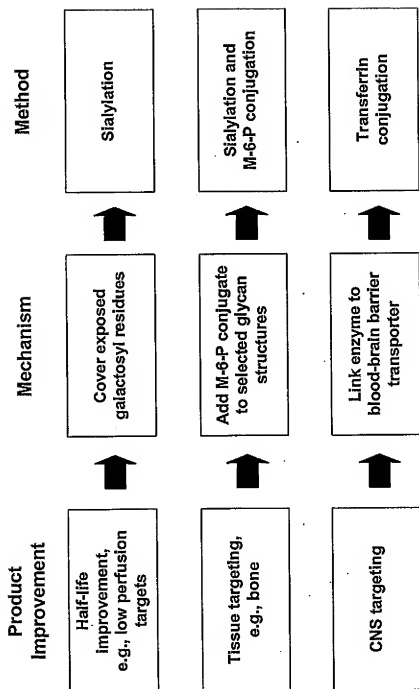


FIG. 23



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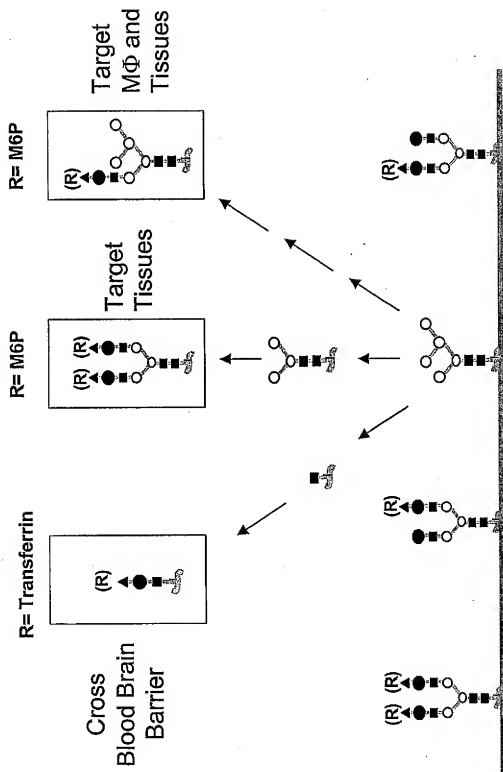


FIG. 24

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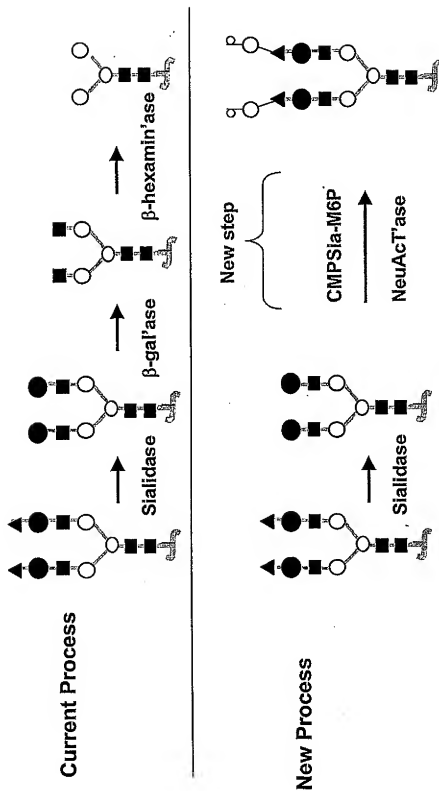


FIG. 25

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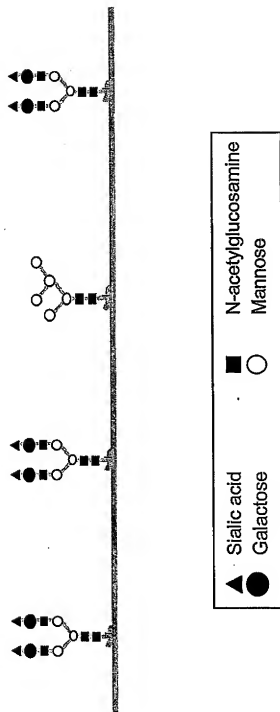
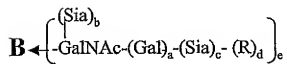
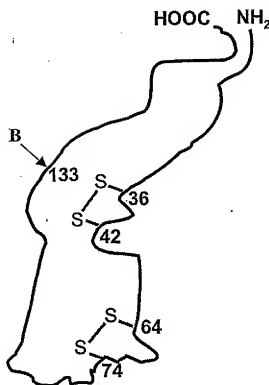


FIG. 26

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a-c, e (independently selected) = 0 or 1;

d = 0;

R = modifying group, mannose, oligo-mannose

FIG. 27A

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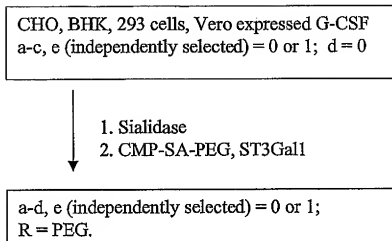


FIG. 27B

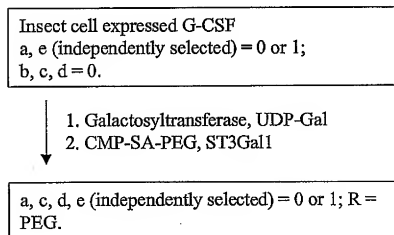


FIG. 27C

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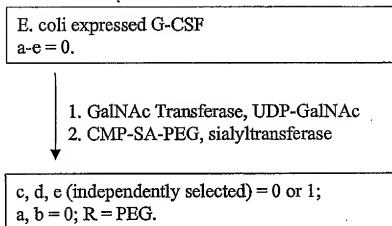


FIG. 27D

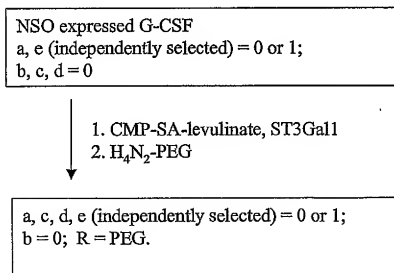


FIG. 27E

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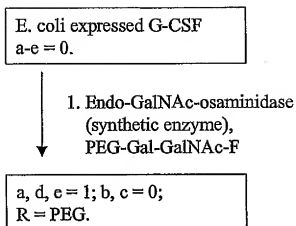


FIG. 27F

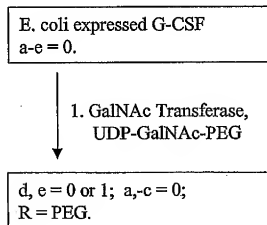
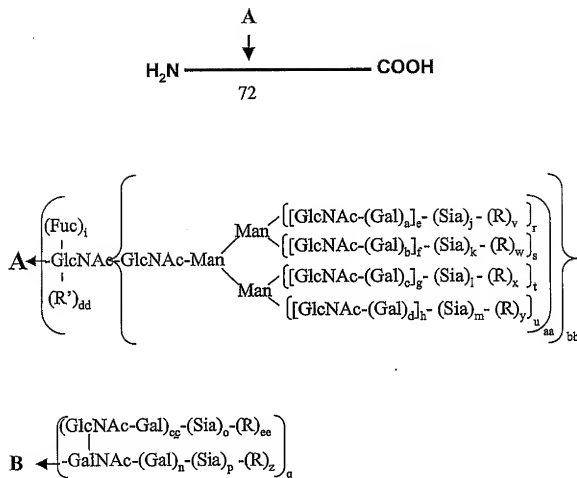


FIG. 27G

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a-d, i, n-u (independently selected) = 0 or 1.

aa, bb, cc, dd, ee (independently selected) = 0 or 1.

e-h (independently selected) = 0 to 6.

j-m (independently selected) = 0 to 20.

v-z = 0; R = modifying group, mannose, oligo-mannose.

R' = H, glycosyl residue, modifying group,

glycoconjugate.

FIG. 28A



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CHO, BHK, 293 cells, Vero expressed  
interferon alpha 14C.  
a-d, aa, bb = 1; e-h = 1 to 4;  
cc, j-m, i, r-u (independently selected) = 0 or 1;  
q, n-p, v-z, cc, dd, ee = 0.

- ↓
1. Sialidase
  2. CMP-SA-PEG, ST3Gal3

a-d, aa, bb = 1; e-h = 1 to 4;  
bb, cc, i, r-u (independently selected) = 0 or 1;  
q, n-p, v-z, cc, dd, ee = 0;  
v-y (independently selected) = 1,  
when j-m (independently selected) = 1;  
R = PEG.

FIG. 28B

Insect cell or fungi expressed interferon alpha-14C.  
a-d, f, h, j-q, s, u, v-z, cc, dd, ee = 0;  
e, g, i, r, t (independently selected) = 0 or 1;  
aa, bb = 1.

- ↓
1. GNT's 1&2, UDP-GlcNAc
  2. Galactosyltransferase, UDP-Gal-PEG

b, d, f, h, j-q, s, u, w, y, z, cc, dd, ee = 0;  
a, c, e, g, i, r, t, v, x (independently selected) = 0 or 1;  
v, x (independently selected) = 1,  
when a, c, (independently selected) = 1;  
aa, bb = 1; R = PEG.

FIG. 28C

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Yeast expressed interferon alpha-14C.

a-q, cc, dd, ee, v-z = 0;

r-y (independently selected) = 0 to 1;

aa, bb = 1;

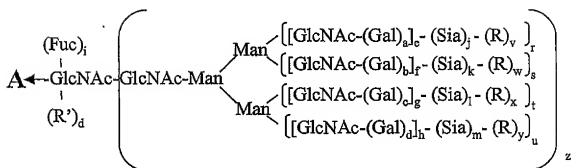
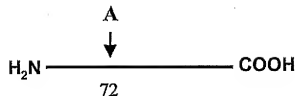
R (branched or linear) = Man, oligomannose or polysaccharide.

- ↓
1. Endo-H
  2. Galactosyltransferase, UDP-Gal
  - 3.. CMP-SA-PEG, ST3Gal3

a-z, bb = 0; aa = 1; R' = -Gal-Sia-PEG.

FIG. 28D

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a-d, i, r-u (independently selected) = 0 or 1.

e-h (independently selected) = 0 to 4.

j-m (independently selected) = 0 or 1.

n, v-y = 0; z = 0 or 1.

R = polymer; R' = sugar, glycoconjugate.

FIG. 28E

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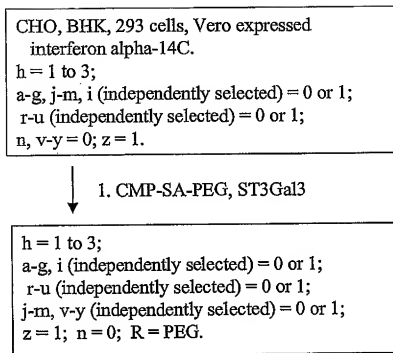


FIG. 28F

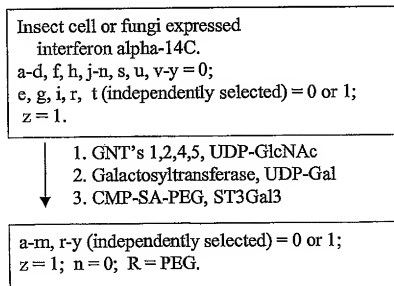


FIG. 28G

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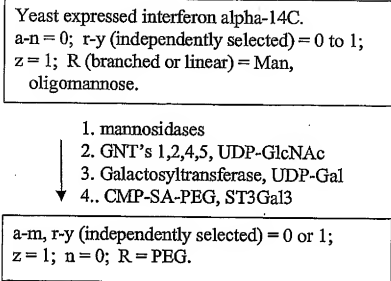


FIG. 28H

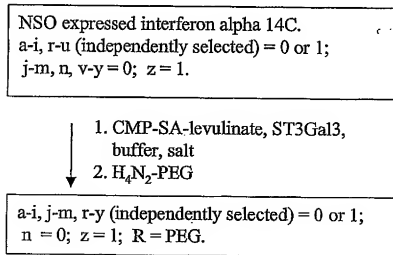


FIG. 28I

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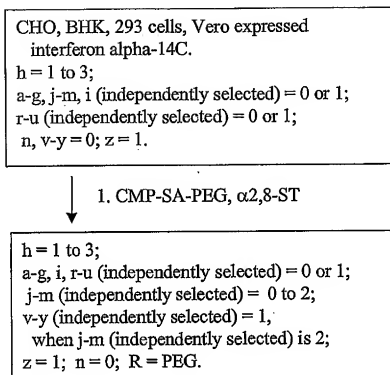


FIG. 28J

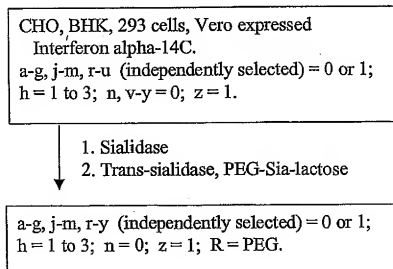


FIG. 28K

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CHO, BHK, 293 cells, Vero expressed  
interferon alpha-14C.  
h = 1 to 3;  
a-g, j-m, i (independently selected) = 0 or 1;  
r-u (independently selected) = 0 or 1;  
n, v-y = 0; z = 1.

1. CMP-SA,  $\alpha$ 2,8-ST

h = 1 to 3;  
a-g, i, r-u (independently selected) = 0 or 1;  
j-m (independently selected) = 0 to 40;  
z = 1; v-y, n = 0.

FIG. 28L

Insect cell or fungi expressed interferon alpha-14C.  
a-d, f, h, j-n, s, u, v-y = 0;  
e, g, i, r, t (independently selected) = 0 or 1;  
z = 1.

1. GNT's 1 & 2, UDP-GlcNAc  
2. Galactosyltransferase,  
UDP-Gal-linker-SA-CMP  
3. ST3Gal3, transferrin

a, c, e, g, i, r, t, v, x (independently selected) = 0 or 1;  
z = 1; b, d, f, h, j-n, s, u, w, y = 0;  
R = transferrin.

FIG. 28M

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Insect cell or fungi expressed interferon alpha-14C.  
a-d, f, h, j-n, s, u, v-y = 0;  
e, g, i, r, t (independently selected) = 0 or 1; z = 1.

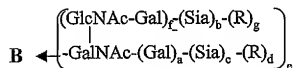
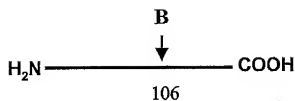
- ↓
1. endoglycanase
  2. Galactosyltransferase,  
UDP-Gal-linker-SA-CMP
  3. ST3Gal3, transferrin

i (independently selected) = 0 or 1;  
a-h, j-m, r-z = 0;  
n = 1; R' = -Gal-linker-transferrin.

FIG. 28N



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a-c, e, f (independently selected) = 0 or 1;  
 d, g = 0; R = polymer, glycoconjugate.

FIG. 280

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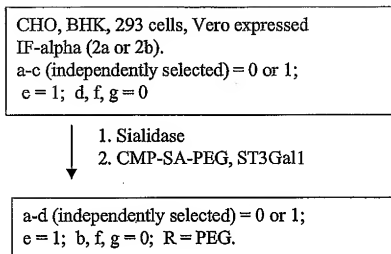


FIG. 28P

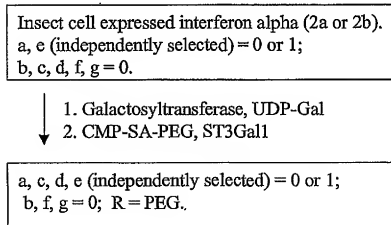


FIG. 28Q

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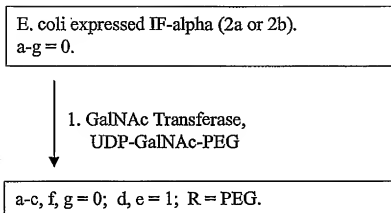


FIG. 28R

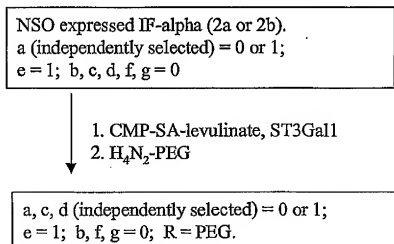


FIG. 28S

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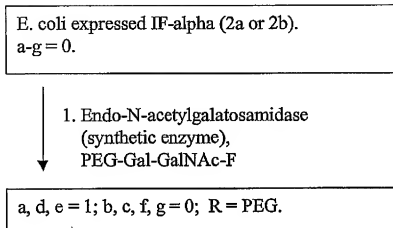


FIG. 28T

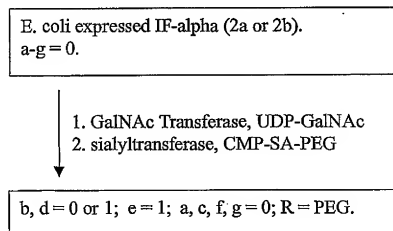


FIG. 28U

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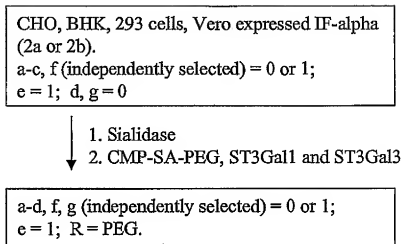


FIG. 28V

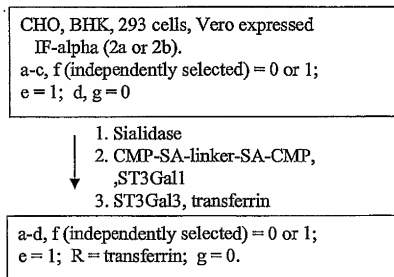


FIG. 28W



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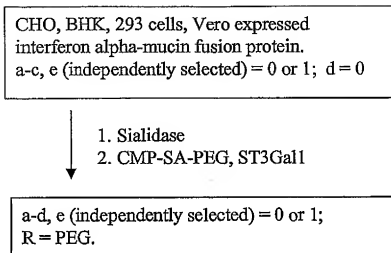


FIG. 28Y

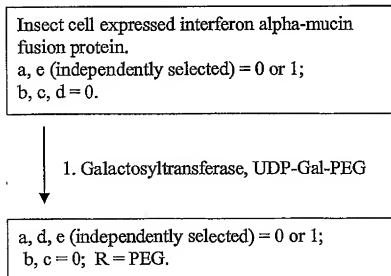


FIG. 28Z

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E. coli expressed interferon alpha-mucin  
fusion protein.  
a-c = 0.



1. GalNAc Transferase, UDP-GalNAc
2. CMP-SA-PEG, sialyltransferase

c, d, e (independently selected) = 0 or 1;  
a, b = 0; R = PEG.

FIG. 28AA





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E. coli expressed interferon alpha-mucin  
fusion protein.  
a-e, n = 0.

↓  
1. GalNAc Transferase,  
UDP-GalNAc-PEG

d, e (independently selected) = 0 or 1;  
a-c, n = 0; R = PEG.

FIG. 28CC

E. coli expressed interferon alpha-mucin fusion  
protein.  
a-e, n = 0.

↓  
1. GalNAc Transferase,  
UDP-GalNAc-linker-SA-CMP  
2. ST3Gal3, asialo-transferrin  
3. CMP-SA, ST3Gal3

d, e (independently selected) = 0 or 1;  
a-c, n = 0; R = linker-transferrin.

FIG. 28DD

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E. coli expressed Interferon alpha (no fusion).  
a-e, n = 0.



1. NHS-CO-linker-SA-CMP
2. ST3Gal3, transferrin

a-e = 0; n = 1; R' = linker-transferrin.

FIG. 28EE